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N.R. BANERJEE

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1

Introduction

A. General

The Latin word 'museum' is derived from the Greek word 'museion' in which it means a temple dedicated to the Muses, or the Greek goddesses of the arts and sciences. These goddesses are nine in number[1] and are recognised as the maiden daughters of Zeus, king of the gods, and Mnemosyne (Memory). They were born at Pieria at the foot of Mt. Olympus. Each one of them presided anciently over a particular branch of the arts, literature or the sciences. Thus Calliope was held as the goddess or Muse of poetry, Clio of history, Euterpe of lyric poetry, Thalia of comedy and pastoral poetry, Melpomene of tragedy, Terpsichore of choral song and dance, Erato of erotic or love poetry and mime, Polyhymnia of sacred song and Urania of astronomy.[2]

'Museum' is thus the most apt word for the modern storehouses of the works of nature and man in all their diverse ramifications though they do not any longer connote the sense of a temple for worship as the original word did, and has thus come to stay. Nevertheless, these storehouses are temples of a sort, for it is here that man is able to seek shelter from the humdrum of life and gaze at his will at the enormity of his legacy, contemplate and learn and derive inspiration for a chastened and nobler life. Though the ancient Greeks may not have thought of all the different branches of arts and sciences, they had indeed laid the foundations upon which the successive generations have merely added the frills.

In Greece, however, 'Museion' did not mean a storehouse of collections of arts and sciences. There is, nevertheless, a reference to a hall called Pinakotheke containing a collection of paintings in a building adjacent to the Prophylaea on the Acropolis at Athens, according to the Greek writer Pausanius, of the second century. It was open to the public. The principal museum in West Germany is hence called the Pinakothek.

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[1] They appear to have been three to begin with but the number grew to nine from the period of Hesiod onwards.

[2] Each one of the Muses was associated with a symbol or emblem or a mood. Thus Calliope was associated with a tablet and stylus, Clio with an open scroll, or a chest of scrolls, Euterpe with a flute, Thalia with a comic mask, shepherd's staff or an ivy wreath, Melpomene with a tragic mask, staff of Heracles or a sword, Terpsichore with a lyre and plectrum, and Erato with a lyre. Polyhymnia had no symbol but was shown in a pensive mood. Urania was equipped with a staff pointing aptly to a globe. See *Encyclopaedia Brittanica* and *Everyman's Encyclopaedia*.

After the Hellenistic period, the Roman generals plundered Greece and removed innumerable works of art to their respective cities and placed them on public grounds or in private houses. Thus began a habit of collecting works of art and curios. It is these collections and the urge to preserve them against damage and decay, plunder and pilferage that gave rise to the idea of a Museum to house them in safety.

The oldest museum in the world, however, goes back to the third century B.C. and it was founded during the enlightened rule of Ptolemy I (Soter) of Egypt (325-285 B.C.), who succeeded Alexander the Great who had earlier founded the city. Its richest treasure was more than 400,000 manuscripts in the form of cuneiform tablets of baked clay. Many of the greatest scholars of the ancient world flocked to Alexandria and advanced their knowledge at this great museum of old. It was, however, primarily a library as a storehouse of knowledge. It is a tragedy of history that the museum was destroyed during the Arab occupation of Egypt in the seventh century. As an institution of education and research this library-*cum*-museum had fulfilled one of the primary functions of a museum in its most modern implication, if not by name, the forerunner of all the museums of the world.*

According to the UNESCO definition of 'Museum', it is to include or comprise any permanent set-up for the purpose of preserving, studying and enhancing by various means and, in particular, of exhibiting to the public for its delectation and instruction artistic, historic, scientific and technological collections. This definition would thus encompass (a) botanical gardens with live specimens, and (b) public libraries and archival institutions maintaining permanent exhibition rooms.

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*The city of Alexandria in Egypt was founded by Alexander. Upon his death the Egyptian territories fell to his half brother Ptolemy (I) called Soter (Saviour) (323-285 B.C.) who founded the dynasty of the Ptolemies. He also founded the first university of the world. This was also called the Museum or home of the Muses. The great masterpieces of Greek thought, philosophy and poetry were stored here in the form of terracotta tablets in a cuneiform script. These were copied by slaves and studied and annotated by scholars. The great Greek scholars were invited to study and teach at this great museum. Every writer was expected to present a copy of his writing to the museum. The museum copied the text as a publishing house and sold them to the public. The scholars were paid a salary.

Such great scholars as the geometrician, Euclid and the mathematician, Archimedes were associated with this institution. Here was translated the Old Testament of the Jews from Hebrew into Greek. Eratosthenes, who had calculated the diameter of the earth to within 50 miles (80 km.) of what it actually is, was one of the teachers here along with Hero, the discoverer of the first steam-engine.

Thus the first great museum was a storehouse of ancient learning, an archive, a library, a research centre and a university at once. From the very beginning of the conception of the museum, it was both a collection and a research and teaching centre, which is equivalent to the modern concept of a museum.

B. Museum and Society

Ian Finlay, who was Director of the Royal Scottish Museum at Edinburgh, retired from that position in 1971, after nearly thirty years of distinguished service in the museum profession. Not long after his retirement, in 1977, he brought out an excellent book serving as the quintessence of his life-long experience of the profession named as *The Priceless Heritage* : *The Future of Museums*. His basic approach and outlook, which have universal validity, are indicated by the telltale captions of some of the chapters in the book, such as 'Collections of Ideas', 'A Museum is not a Building', 'Taking Museums Seriously', 'The Case for a Comprehensive Museum', 'Museums as a Profession', 'Museums and the Universities' and 'Who should run our Museums', etc.

There are some obvious answers to the questioning or suggestive nature of these captions in the captions themselves. He has raised some questions that we have often asked ourselves. He has also given some very valid suggestions for the proper running and utilization of the museums.

In the chapter on 'A Museum is not a Building', Finlay says, "The most positive purpose of a museum, where the man in the street is concerned, is to stimulate curiosity, pleasure and even awe by confrontation with the works of nature and man, through this to rouse a hunger for knowledge and give guidance". If, therefore, the museums have to serve this role as a systematized collection of the works of man and nature and use them for the enlightenment and education of the people in a more positive manner than is possible through class room lectures in this age of speed and of audio-visuals, they must also be made to serve as a source of delight and as a means of the full development of a man's personality. In today's world museums must also help to create a spirit of educated and responsible democracy among their vistitors. For all these purposes museums would need far more attention from the society than they have received so far, particularly in India.

This need, however, has been recognized by the Government of India, and the Department of Culture, under the Ministry of Human Resource Development, have planned for a coordinated development of museums at regional, state, district and village levels for the promotion of the awareness of the basic values of Indian culture. This is to be achieved through the dissemination of education in general and inculcation of the knowledge of science and technology. For this purpose they have planned to help the museums in general to develop and augment the documentation of their collections not merely for the purpose of dissemination of knowledge, but also for providing the basic prerequisite for the promotion of research in all these areas. But concerted action in all these fields is yet to be seen.

In the chapter on 'Taking Museums Seriously', Finlay laments, ". . . . . museums count for much less than they should. Their functions and potentialities are hardly understood at all by politicians, administrators, economists and those professionals and businessmen who determine our scale of values in public affairs. Museum continues to be a derisory word in public speeches for anything that is out of date. The very word

'Museology' . . . although current in the profession for a generation or more has not yet found its way into some of the way more widely used dictionaries".

There is no doubt that Finlay was influenced by the prevalent conditions of the United Kingdom. But his observations are perhaps true for all parts of the world, and more so for India.

The late C. Sivaramamurti, who, besides being a profound scholar, was a doyen of the museum profession, had long ago expressed his views that are reflected in Finlay's writings. As far back as 1953 (a good 24 years before Finlay) Sivaramamurti wrote, "The Curator is a living force in a museum, but nowhere else is a Curator more neglected than in India though prodigious knowledge and enormous achievements are expected of him. . . . . If a scholar should sacrifice ambition, the curator alone should not be singled out for this".* He made the position clearer still in his views on the museum curator expressed in the *Directory of Museums*, published in 1959.

Museums in general began, as pointed out earlier, as collections of curios, either the handiwork of man or of nature, or of both, but mostly as a result of the efforts of individuals and, sometimes, of societies or associations of curious intellectuals of diverse disciplines. In course of time the collections grew in numbers and could no longer be contained in their original storehouses. They also presented problems of preservation against natural decay. They had, therefore, to be housed properly and they needed a caretaker. The objects had to be handled, classified, listed, displayed or neatly stored. They had also to be studied if their meaning and message were to be understood, appreciated, admired and enjoyed. These had also to be transmitted to others. Thus was the museum born.

In modern times the concept of a museum has widened beyond recognition. It is no longer a storehouse of the artefacts of man and nature or an *ajāyab-ghar*, as of old, where objects were collected, stored or stocked, preserved and occasionally but not obligatorily published, but a centre of education, research and entertainment to boot. In fact, it has now become a cultural centre where activities of all kinds that serve to widen the mind's horizon and ennoble the spirit centred around diverse artefacts of man and nature take place. Much or most of the development owes itself to the twin pillars of financial resources and the width of vision, energy and competence of the Curator. The quality and standard of all the activities of a museum depend upon how informed, enlightened, enthused and active the Curator is, and how able he is to transmit his spirit to the community he serves. Not a little, however, depends upon the trust and support of the authorities who own, control or manage the museum, be they a Government, a board of trustees, a University body, a Municipality, or an individual owner.

A museum today can be broadly divided into six categories, namely, of art, archaeology, ethnography, natural history, science and technology, respectively with many possibly minor sub-divisions. These again lend themselves to division into two main categories, namely, art, archaeology and ethnography on the one hand, and natural history, science and technology on the other.

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*C. Sivaramamurti, *Directory of Museums*.

Of course, for consideration of financial constraints or comparative paucity of the respective collections, commonness of ownership or convenience of management museums can be of several multiple disciplines together. In such cases either they grow to be too large and cannot, in course of time, work successfully under a unified control owing to the inherent divergences of the disciplines involved, or they remain so small that they cannot be fully representative of all or even most of the facets of the various disciplines they encompass. Their growth can also be disbalanced according to the predilection of the curators and the authorities.

Nevertheless, it is not unusual to see combinations of natural history, art, archaeology and ethnography, especially at the regional or State levels in India. Such museums can be broadly termed as multi-purpose or multi-disciplinary museums. Even within the same discipline again there can be basic differences of categorization according to the nature of the objects such as folk arts, tribal arts, or crafts, sculpture in stone, bronze, terracotta or ivory, paintings on palm leaf, paper, cloth, or on walls (murals) or much more broadly as ancient medieval or modern arts, as the case may be. Among science museums too different categories exist such as museums of pure science or applied science, of mining, and metallurgy, and technologies of a wide variety such as textile technology, printing technology, etc. The museums may have nomenclatures according to the authorities which own control and manage them such as the Central Government, the State Government, the Universities, Colleges, Municipality, private and public trusts or individuals, as the case may be. Depending upon their size and location they can be very small village or town museums called local museums; moderately large regional museums at the State capitals or any other large city or township, and very large national museums. In addition to these there are many archaeological site museums housing the excavated archaeological remains at ancient sites such as those at Sanchi, Sarnath, Vaisali, Lothal, Nalanda, etc., under the Archaeological Survey of India or Zonal anthropological museums under the Anthropological Survey of India. There are many departmental museums under various Government departments such as the Museum of the Forest Research Institute at Dehradun. Among the national museums mention may be made of the National Museum, the National Museum of Natural History, the National Gallery of Modern Art, the Handicrafts and Handlooms Museum and the Rail Transport Museum at New Delhi. There are several other museums of comparable status but not under the Government of India. The Central Government is building a National Museum of Man at Bhopal. The large Science and Technology Museums under the National Council of Science Museums at Calcutta, Bangalore, Bombay and Patna, the last being the smallest of the group, bid fare to possessing national status. The Indian Museum at Calcutta and the Salarjung Museum at Hyderabad are fully financed by the Central Government but are autonomous institutions under the control of their respective boards. They are also museums of national status. The Prince of Wales Museum of Western India at Bombay, which is a multi-purpose museum combining the disciplines of art, archaeology and natural sciences, is one of the most outstanding museums in this country. Yet it is not of national status, nor under the control of the Central or State

Governments, but under a board of trustees. Among the important regional or State museums in this country mention may be made of the Government Museum, Madras, Patna Museum, Patna, State Museum, Lucknow and the Museum and Picture Gallery at Baroda. The Museum and Picture Gallery at Chandigarh, though not fulfilling as yet the requisites of a State Museum, as it is still under the Union territory, and the Government Museum at Mathura are outstanding museums of art and archaeology, but do not possess national status.

Among the University museums in India mention may be made of the Asutosh Museum of Folk Arts, Calcutta, the Bharat Kala Bhavan, Varanasi, the growing Archaeological Museum of the Deccan College, University of Poona (Pune) and the Kausambi Museum at Allahabad.

Among the municipal museums the best was, of course, the Allahabad Museum. It has since been taken over by the Government of India. The small but tidy and impressive Zoological Museum, as an adjunct of the Zoological Gardens, at Ahmedabad is remarkable for the quality of its presentation.

Among the outstanding museums built up by private effort are the Arthropoda Museum and Raja Kelkar Museums at Pune, and the Calico Museum (of textiles) at Ahmedabad.

A word now about the pivotal person in the set-up of a museum, namely, the Curator. The word is derived from Latin in which it means the guardian of a person, a boy or a girl, or caretaker of property. By implication the term came to be applied to the caretaker or guardian of a museum, or public gallery of art, library or the like.

Its earliest use goes back to A.D. 1661. In modern times it has often been replaced by the word 'keeper', especially in Great Britain. This nomenclature has now been generally adopted by the National Museum and other Museums under the influence of the Central Government. In the United States the word 'Curator' holds the field instead. In France he is called Conservatoir (conservator), which is quite a meaningful and satisfactory designation. It points to the principal function of the museum man, namely, conservator of the objects under his charge. However, sometimes for the sake of parity in service and uniformity of service rights of the personnel of comparable or relatable status in a museum in regard to seniority or promotion, the term has also been employed absurdly in respect of persons in charge of presentation or display, modelling (preparation of replicas) and publication, respectively, as at the National Museum, New Delhi.

C. The Curator

Going back to history, it may recalled that it was under Lord Lytton, who was Governor General of India in 1879 that the scheme for the appointment of a "Curator of Ancient Monuments" was first formulated. Major H.H. Cole was the first person to be appointed to the post in 1880, when it was created during the Governor Generalship of Lord Ripon.

By whatever name he is called, the curator is the most crucial person in a museological institution. The success or failure of the institution depends upon his academic background, powers of imagination, capacity for hard work, dedication to his duties, a high sense of responsibility, tact and capacity for man management, and, of course, his museological knowledge.

The various duties which a curator is expected to perform comprise (i) acquisition of museum objects, (ii) their registration, i.e., documentation, (iii) storage, (iv) display or presentation, (v) conservation, (vi) study and research with a view to interpretation, (vii) publication of the results of research as well as a miscellany of literature such as guidebooks, posters and picture postcards for the general visitors, and catalogues and dissertations in regard to the holdings of the museum for the benefit of scholars, (viii) ensuring the safety and security of the museum materials under his charge against damage and degeneration, vandalism, pilferage or burglary and accidents, (ix) offering guide service to the visitors in general, and, in the modern concept of a museum's functions, fulfil the duties of a teacher of students at all levels of education, and, above all, (x) run the administration of the museum. In addition the Curator/Keeper is expected to organize temporary exhibitions often by obtaining loans of selected objects from other museums. This task is as delicate as it is full of tension. He has to use his persuasive powers to make the lenders ready to lend on mutually acceptable terms. Thereafter he has to arrange for and supervise the safe transportation of the borrowed objects to his own museum and ensure their safety and security during the period when the objects are under his custody. He has also to arrange for their insurance according to an agreed valuation. The process of installation in the exhibition is quite complicated and strenuous. The entire process is repeated in reverse gear on the return of the borrowed objects to their lenders or owners.

In a small museum where the staff is small the demand upon the knowledge, tact resources and energy of the Curator is enormous. He is also expected to know something of every line of discipline represented in his museum. It is the smaller museum which at once poses a challenge to the talent of the Curator and provide him with opportunities to prove his mettle. The late Dr. V.S. Agrawal, who was a giant among scholars of Indology in India, began his career as the Curator of the Government Museum at Mathura, which was then much smaller in his time than it is now.

In larger museums where there is a comparatively large staff, the responsibilities are divided. Even so there is no let up in the responsibilities of the Curator even in respect of his restricted Curatoral duties. Given the talent and inclination he can concentrate on his allotted or chosen field in keeping with his academic and professional background, and specialize in selected areas of scholarship. The job in a museum is full of challenges and opportunities and to a person who is prepared to take pains it can be extremely rewarding. The work in a museum is of a creative nature, but for all his labours a Curator is not paid adequately for all the heavy responsibilities he has to shoulder.

D. Museums and their Functions in the Indian Context

Enough has been said earlier to point to the multifarious functions of a museum as a storehouse, a cultural centre, a centre of education and research, and as a centre of general education of masses, particularly the children and illiterate masses.

This role of the museum has now generally come to be recognized by the society. The museum's primary duty of collection of material remains in all conceivable areas of our heritage and of documenting them faithfully, preserving them against decay and arresting the decay of those that have decayed or have started decaying has only to be emphasized for, without material objects in a sound condition of preservation, a museum can be no more than an empty building. All these activities involve considerable expense and, therefore, need ample financial support.

It is not possible for the slender resources of private individuals or teaching institutions like colleges or universities to find all the finances that museological works demand. It is possible only for the Government to sustain museums with some measure of finances needed for collection, documentation, and preservation of objects and dissemination of knowledge in general based on them. Even so there is some limit to Government's resources as they have to be used judiciously on their myriads of activities on the basis of an order of priorities carefully laid down by them. While recognising Government's potentialities and limitations, it must also be stated that the private enterprise too has some scope as well as obligation in this direction as much as they have the rights to enjoy the benefits accruing from the maintenance of museums.

In this context it would be pertinent to quote from the message of Pandit Jawaharlal Nehru on the occasion of the formal inauguration of the National Museum on the 18th December, 1960 in its new building : "Museums are not just places to see odd things or *Ajāyabghars*, as they used to be called. They are or should be an essential part of the educational system and cultural activities of a country. What is more, they are places of public education. Private houses may have works of art and beauty, but they are not open to the public. It is important that every city possesses a museum and, I would add, even villages have their small museums wherever possible. Some of the great museums of the world are not only collections of the works of art, but are more especially fascinating in showing the development of man. Indeed perhaps no single museum, howsoever big, can contain all these many aspects, and it may be desirable to have several museums to exhibit these varied cultural and other activities."

Professor Humayun Kabir, exclaimed on this occasion: "No modern state, and least of all, a democratic republic like India, can do without these essential instruments of education, recreation and culture. Democracy means every man's participation in Government and unless the participation is based on knowledge and understanding, it may do more harm than good. Provision of education for all citizens is thus one of the inescapable duties of the modern State. It has been recognized that the traditional methods of imparting education in schools and colleges cannot cater for all classes of people and for all age groups. The curricula in the schools do not and cannot cover all the subjects which the modern citizen must know. The spoken word of the teacher and the written word of the book has, therefore, to be supplemented by audio-visual aids.

A well organized museum is an audio-visual instrument that can cater to all classes and age groups and cover all fields of knowledge."

Humayun Kabir rightly enunciated that the agro-industrial civilization of today had given rise to intense curiosity in the common man about the basic facts of science as well, and that it was the duty of the State to create facilities for the satisfaction of such curiosities. Museums are the proper institutions for the realization of this purpose.

The different parts of the world today, howsoever far-flung, have come much more closer than ever before, thanks to the rapid development of modern means of communication and transportation. The increased use of the wireless, the T.V. and video programmes, the supersonic jets fleeting across the skies at hitherto undreamt of speed, greater intercourse between nations through the various organizations of the United Nations in the post-war period, the achievement of independence by many hitherto subject nations, and various global conferences have all led to a tremendous growth of intercourse among divergent peoples. In fact, notwithstanding glaring differences in standards of living, philosophies and life concepts and ways of living, and, of course, political ideologies, we are all approaching Wendell Wilkie's concept of One World. Though in their heart of hearts sober people all over the world may realize the essentiality of oneness of the human will, political will and egotistic intransigence stand in the way of a life-pattern of mutual co-existence. The spectre of any nuclear holocaust overhangs the human '*Schicksal*', while millions are still striving for a morsel of food to keep body and soul together, in spite of man's tremendous achievements in space research and in all spheres of science. It is, therefore, necessary, even for the sake of sheer existence to promote rapidly a proper understanding of the different peoples of the world in all their ramifications of history, society, religion, way of life, advances in science and technology and political ideologies, etc. Science and technology know no bars of territory, more so now than ever before. Art and culture of the different parts of the world are interrelated, being the result of the cravings of the human soul. There is no institution which can bring the comprehensive ethos of any one people to the very doorsteps of another more effectively than museums through their attractive and effective presentation in permanent displays and temporary exhibitions. These help also to bring the people's souls together.

With a view to realizing these objectives it is necessary, nay essential, that some of our museums today should have representative specimens of original objects reflecting upon the history, arts and crafts, cultural life, scientific and technological achievements of the different parts of the world, so that their holdings are not confined parochially to those of the geographical boundaries of the nation. This principle would apply equally to the museums of all other countries as well. As though in anticipation of this conception most of the affluent nations of the world have been collecting extra-territorial materials of all kinds and filling up their museums with such relics of the world.

It was the late Sir Asutosh Mukherjee, then Vice-Chancellor of the Calcutta University, who, among Indians, was the first to define in unambiguously clear terms the functions of a museum. Speaking on the occasion of the centenary of the Indian

Museum in Calcutta on the 28th November, 1913 he said, "I have no desire on the present occasion to enter upon an exhaustive discussion of the true functions of a museum in relation to the community at large . . . It is now generally recognised that a museum is an institution for the preservation of those objects which best illustrate the phenomena of Nature and the works of Man, for the utilization of these in the increase of knowledge and for the culture and enlightenment of the people."*

Though Sir Asutosh said this in the context of the Indian Museum conceived of by him as a National or Imperial Museum, a museum, according to him must "be equipped adequately for the fulfilment of three principal functions, viz., first for the accumulation and preservation of specimens such as form the material basis of knowledge in the Arts and Sciences; secondly, for the elucidation and investigation of the specimens so collected; and thirdly, to make suitable arrangements calculated to arouse the interest of the public and to promote their instruction." In regard to the role of the museum as an educational institution he added that "the museum should be an adjunct to the class room and the lecture room; secondly, as a bureau of information, and, thirdly, as an institution for the culture of the people."

Ananda Kentish Coomaraswamy, who was a mineralogist and had even entered the technical profession in his homeland, was soon fired by a sense of appreciation of the past achievements of his paternal ancestors. He, therefore, gave up his technical calling before long and devoted himself to the study of the traditional arts and crafts of his land and of the original homeland of his ancestors. In the course of his study he could lay his hands upon many a specimen of the ancient arts and crafts. Gradually he built up an interesting and varied collection of Ceylonese (Sri Lankan) pottery, brass-work and bronzes. He also made purchase, on the basis of the insight he developed, of art objects for the Colombo Museum. He noted, however, with regret that modern civilization has created an attitude of apathy, if not antipathy, to our tradition. He, therefore, urged that "the formation of a museum" to house the "relics of the past" will help us to give up our habit of regarding old relics such as I collect as curiosities".** He felt, therefore, that the setting up and development of museums and storage and presentation therein of the relics of the past as well as significant gifts of nature would help to generate and revitalise our interest in our own heritage of man and nature and would promote a sense of national pride and stimulate all the forces of integration.

Yet paradoxically Coomaraswamy went on to lament "certain fine things that used to be available in every market-place in the world are now only to be seen in museums. Because they are to be seen in museums we imagine that we are cultured. . . . We know by their work that men of old were cultured." Already in his younger days, nearly eighty years ago, *bric-a-brac* and *disjecta membra* detached from their pristine moorings and without any visible remains of their perspective had begun to find their way into

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**The History of the Indian Museum*, printed by the order of the Trustees of the Indian Museum, Calcutta, 1914.

**A.K. Coomaraswamy, *Domestic Handicrafts and Culture*, 1910, pp. 14-15.

museums. It was the loss of perspective and background that had distressed Coomaraswamy. But there was no alternative to collecting and recording such orphaned finds in the hope of piecing them together again in the future, and storing, preserving and studying them in their new museum home. The situation reminds one of the nursery rhyme on Humpty-Dumpty.

Rabindra Nath Tagore, the poet and Nobel-Laureate, also devoted his thoughts to the meaning and purpose of museums.* He emphasized the need of their growth in India as well the flowering of their functions, especially in the field of education on the analogy of the Soviet example which he had personally observed shortly after the Russian Revolution of 1917. The Soviets had felt the need of quickly educating the masses on the meaning and value in their daily lives of the October Revolution. They employed various methods for this purpose and found that the museums were the best and quickest means of spreading the message audio-visually. In order to realize this objective the authorities introduced a network of museums in villages and towns, and devised carefully worked and graded guiding programmes suitable for even the unlettered. The programmes were made very crisp and short and did run for more than ten minutes at a time. They were so contrived on the proven premise that the unlettered adult mind or juvenile audiences cannot concentrate with comprehension on any topic for a longer period. The success of this experiment was instantly realized.

Tagore also observed that the museums in Soviet Russia were linked with the Regional Study Centres, the purpose of which was to delve into the local history of the region including the economic conditions of the people in the past and present. These centres also made enquiries into the mineral resources of the region as well as into their sources of energy. The museums attached to these centres played a major role in the dissemination of education among the masses. The new age of Soviet Russia found a special and effective role for museums in the task of bringing education to the door-step of the masses.

Tagore waxed eloquent in this context on his rich experience of the Tretyakov Gallery of Moscow. At the time of his visit, in 1930, about 3,00,000 people had visited the museum in a span of two years between 1927 and 1929, and that it was difficult in the prevailing circumstances of the times to accommodate any larger number. In fact in order to avoid disappointment and inconvenience to prospective visitors a system of prior reservation had to be introduced.

The success of the Russian experiment and new system was reflected in the increasing popularity of the museums in general. Before the Revolution it was the bourgeoisie which had the monopoly of museums as it were. But the revolution had put an end to the bourgeoisie, and had thrown open the flood-gates of the old bastions of privilege to the proletariate who grasped their new-found freedom, right and opportunity with avidity.

In this connection the case of the Hermitage in Leningrad may be cited. The

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*R.N. Tagore, *Russiār Chiṭhi* (Letter from Russia—in Bengali).

Hermitage is one of the largest museums of the world and specialises in arts. It is a museum of the "material culture of the West and East from the pre-historic times to the present day". The museum comprises five buildings, the oldest of which, the Winter Palace, was built in the 18th century. The Winter Palace museum containing the palace acquisitions of foreign paintings was founded in 1764. First it was the exclusive preserve of the royal family, often only of the tsar or tsarina. Later it was opened to "select guests". It was only after the October Revolution of 1917 that it was thrown open to the public.*

Tagore felt that it was necessary consciously to create a feeling for art among the people, for it ennobles and heightens our lives, but it is extremely difficult to convey a feeling for art to the uninitiated. The uninstructed, therefore, tend to roam aimlessly in the galleries of a museum and soon lose interest as well as their way. This phenomenon of human or visitor psychology has been appreciated in Soviet Russia. With a view, therefore, to making the museum visits purposive and fruitful the progress of the visitors through a museum is properly channelized free of charge by well trained guides who are adept in the art of communication and transmission of education.

In the process of the exposition of the works of art, especially paintings, displayed in the galleries the guides tell the visitors and listeners about the composition, colour-scheme, perspective, distribution of space, illumination of the objects portrayed and the technique and style of the painting of any one artist or period.

Tagore felt that our museums should insist that the guide lectures should not spend more than twenty minutes at a time over a selected group of pictures. The guides, according to him, should aim at bringing home the message of the painting as well as the interrelationship between the subject-matter and the spirit. Sometimes the differences between one piece and another drives home the point very effectively. Care should also be taken by the guides to make sure that the visitors are not tired out.

Tagore thus emphasized the educational aspects of museums in a very practical manner bearing the prevalent conditions of India in mind. The suggested approach and procedure would apply to museum objects of every description and museums of every discipline and in every country and, more so to the museums in India where the pressing need of the day is the rapid spread of literacy and education among the masses, in all age groups. Education would, therefore, occupy the pride of place in the scheme of museum activities in India for a long time to come.

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*Victor Mushtiukov and Lev Tikhonov, *The Museums of Leningrad*, Moscow, 1982, pp. 92-93.

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Growth of Museums in India

A. General

It has become customary to refer to the growth of museums in this country as the museum movement. The nomenclature is clearly a misnomer, for it connotes a popular movement for the setting up and development of museums, like the Swadeshi Movement or Freedom Movement. For several reasons such has not been the case in India.

The long-standing tradition of *Chitraśālās* or *Chitrakaṭhis* prevalent in this country did not give rise to the idea of museums in the region. Some of the movements which have come down to us from the past can at best serve as components of museums, but did not constitute museums by themselves. For instance, the numerous inscriptions of Asoka recorded on natural rocks or on deliberately and exquisitely carved pillars and in one case on a copper plate (Sohagaura) are a rich storehouse of information and excellent archival documents but not museums by themselves. The caves of Ajanta with their rich repertoire of rock-cut architecture, sculptural embellishments, and mural paintings representing both religious and secular or semi-religious themes, creating as it were a living atmosphere, and an inscriptional record documenting the execution of some of the caves may be constituted as small local museums today, but were not museums *per se* at any time in their history. The early 11th century temple of Brihadisvara at Thanjavur is not merely one of the best preserved monuments in India with a rich assemblage of sculptures installed in an architectural setting, and enclosed by a cloister povided with lofty gateways and richly documented with inscriptional record, but one that comes nearest to a concept of museums. The paintings executed on the walls of the circumambulatory around the *sanctum sanctorum* not merely provide us with a rich fare of painted scenes executed with great skill and technical excellence, but also records from mythology and history of the exploits of the lord of the temple, Śiva, and its builder, the king, Rajaraja Chola, his preceptor, Karuvur Devar, and suggestions of the service of *Devadāsīs* to the enshrined divinity through programmes of dance and music etc. The inscriptions engraved on the plinth and walls of the temple record not merely the details of the construction of the temple, but contains a list of the bronzes and ornaments and other loose objects bestowed upon the temple. The documentation provided is meticulously correct and anticipates the documentation methods in vogue in today's museums. The temple premises witnessed religious festivals and discourses, social functions, musical, dramatic and dance programmes and the like. It, therefore, served fully as a cultural centre, an educational centre and a social centre at once, besides a centre for ennobling entertainment. The king had to rely on a gradation of employees for the upkeep of the establishment and conducting of all the functions broadly indicated above, as well the maintenance and repairs of the structure. Naturally also security was provided for. Thus the Brihadisvara temple can be regarded as the earliest well documented museum-like institution in India. It must be stated in passing that the tradition of this temple was characteristic of all religious establishments in the country be they *stūpas*, rock-cut monasteries, or structural dwellings irrespective of religious denominations. In this sense, the *stūpas* at Bharhut and Sanchi, with their labelled sculptures and records of donations would constitute the earliest examples, going back to the second century B.C. Only the scale differed, and the written records were much less eloquent.

We have also the evidence of Mat in District Mathura in Uttar Pradesh where a veritable museum-*cum*-temple with labelled sculptures of the imperial Kushana rulers were displayed and preserved and can be dated to the early centuries of the Christian era (1st-2nd centuries A.D.).

Regardless of what has been stated above, the oldest museums in India, in effect though not in name, probably had come into existence in the form of picture galleries in pre-historic times, of which a large number has been found in recent times in Madhya Pradesh and Uttar Pradesh. Those around Bhimbetka in the valley of the Betwa near Bhopal in Madhya Pradesh are well known.* While the paintings on the walls of natural rock shelters of the pre-historic man may have served a magico-religious purpose they also tell us about the life-style and thought processes and experience of the people who created them. The purpose of these creations was also to transmit their message and impact to posterity. The tradition continued throughout the later periods, and it is not necessary to elaborate upon them.

A passing mention may be made of the picture galleries of Bagh and Ajanta, the rock-cut caves of west and south India, such as those at Ellora or Mahabalipuram, the architectural remains of *stūpas*, monasteries, temples, mosques, palaces and forts etc. throughout India, besides the collections of manuscripts and miniature paintings, textiles, furniture, utensils, ornaments and numerous other works of art and craft, etc. These did serve the purpose of museums though they were not surely named nor mentioned as museums of any kind.

Such magnificent works of art and architecture were no doubt created at great expense, and it was considered a sacred duty for all concerned to preserve them for future generations. In spite of the best efforts and ingenuity of man, it is indeed not possible for him to preserve his heritage in perpetuity. The destructive forces of natural decay, periodical warfare, pestilence, natural calamities like excessive rains, floods, earthquakes or outbreaks of fire and numerous other factors are constantly working deleteriously upon them.

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*V.S. Wakankar was the first scholar to discover them and bring them to the notice of the public.

These are, however, valuable sources of information on all aspects of our lives throughout our history and an essential means of education as well. As works of art they provide us with delight and entertainment. They are, therefore, in the nature of 'museums'. There can be no doubt, however, that the various kings and dynasties that flitted across the chess-board of the Indian sub-continent had their royal archives of documents of charters, grants, correspondence and record of events and libraries. Being recorded on perishable materials like palm leaf or cotton or silk cloth or wooden plates, all these have perished. The stone inscriptions and occasional records on copper plates are the lone sentinels of the phenomenon. These were indeed 'museums' of a kind.

While probably the oldest museum of the world was founded in the third century B.C. at Alexandria, as already pointed out earlier, the earliest museum in the world, called as such, is the Ashmolean Museum founded at Oxford in England in 1682. The museum came to be set up with the nucleus of a collection of diverse art materials donated by one Mr. Ashmole. These had come to him as a bequest from a relation of his, a Dutchman, called Mr. Tradescant.

The political situation in India, which was divided into a congeries of States, on the decline of the Mughal empire, before the advent of the British upon the scene, had stood in the way of any coordinated or interlinked effort in the direction of setting up any museum *per se* on the sub-continent. In fact, it was not until 1817 that the gradually expanding British empire of India marked the culmination of all efforts at empire building that had started with the victory of the English East India Company in the infamous battle of Plassey (1757) in West Bengal. The hundred years from 1757 to 1857 was a period of expansion and unrest for the English power in India. But with the quelling in 1858 of the first great revolt of the Indian people, called also the first War of Independence, often miscalled as the Sepoy Mutiny, that a status of some kind of temporary equilibrium and stability was reached. The English rulers of India could then relax somewhat and consolidate their position in the land of conquest. While transplanting their own traditions upon an alien soul they could not ignore the local traditions. They had, of necessity, to acquaint themselves quickly with the people whom destiny had made their subjects. They had to learn their languages, the characteristics of the divergent races, castes and creeds, and their history, besides the geography, flora and fauna, climate, resources of energy, trade and industry and nuances of agriculture, and mining and the like, to be able to exploit and utilize all the resources to their advantage as well as create conditions of comfortable living for themselves. Literature of all kinds recorded in manuscripts and inscriptions, monuments of art and architecture, history of economy and money management as recorded in the archives of old or in the coins of all kinds grew in volume. No doubt a good part of the inspiration came also from a spirit of enquiry and thirst for knowledge. This quest for a two-fold purpose has led in course of time to the setting up of various institutions of survey, such as the Survey of India, the Archaeological Survey of India, Botanical Survey of India, Zoological Survey of India, and Geological Survey of India etc. for work of exploration and research in the respective areas of specialization.

In this context it would be interesting to quote from the injunctions* issued for the ministers (of Christian religion) stationed in India contained in the Charter granted to "the English East India Company trading to the East Indies" by King William III in 1698 :

". . . . They shall be obliged to learn after their arrival the Portuguese language and shall apply themselves to learn the native language of the country where they shall reside, the better to enable them to instruct the *Gentoos* (i.e., Hindus) that shall be the servants or slaves of the same company or of their agents, in the Protestant religion." The purpose behind this injunction is clear and only emphasizes the basic objective of the foreign and distant ruler.

The study of anthropology, ethnography and customs, usages and law was also prompted to a great extent by the dictates of practical necessity. "Servants of the East India Company were quick to notice the usages of Indians which differed from their own, and many notes on such matters are found in the early narratives. The customs of the people assumed practical importance for administrators when in their judicial capacity they were faced with such matter as the rules of inheritance or when their official duties concerned problems of land revenue and administration."**

Other aspects of Indian life encompassing astronomy, mathematics, economic wealth and medical science also attracted the attention of the British. This interest led to the collection of treatises on these subjects as well as materials for the advancement of the studies. The spirit of enquiry had led to the founding of the Asiatic Society by Sir William Jones in 1784 under the patronage of Warren Hastings, Governor General of India.

At the beginning of the 19th century the East India Company founded in London an "Oriental Repository", both as a library of books and manuscripts relating to and sent from India and, more particularly, received from men who had served in India and had made large book collections of their own as well as a *museum* to house objects of interest and study from the archaeological, artistic and scientific points of view."@ This was perhaps the first great effort to found a museum of Indian materials in the West. It had indeed a bearing on India, howsoever indirectly, as it marks the first effort to draw the attention of the Western world to the richness of Indian heritage in all its facets and nuances. Its collections were enlarged from time to time by prudent purchases, gifts and bequests of men who had served in India and had built up collections of their own. In fact an attractive scheme was made to found towards the middle of the 19th century an Indian Museum of Fine and Industrial Arts, but had to be given up for lack of funds. In the seventies of the century the collection in the museum part were dispersed. The objects of industrial arts went to the Indian Section of the museum at South Kensington, now called the Victoria and Albert Museum, and the archaeological, sculptural and

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*Atul Chatterjee and Richard Burn, *British Contribution to Indian Studies*, 1943, pp. 9-10.

***Ibid.*, p. 41.

@*Ibid.*, p. 46.

natural history collections were given to the British Museum, both in London.

The young museum movement of India began with the setting up by the Asiatic Society of the *Oriental Museum of the Asiatic Society* in Calcutta in 1814. Its purpose was objects to house the miscellaneous objects of art, archaeology and natural history that were being accumulated by the exploratory activities of the Society. The purpose of the Society was to promote deep and wide knowledge of the country's history, culture, religions, geography and natural resources among the new rulers of the land with a view to equipping them properly for their new role. Incidentally it could not close its doors to the local people nor shut out the benefits for them. The Oriental Museum later developed into the Indian Museum, as it came to be so called in 1866. It shifted to its present building in 1875 and was thrown to the public on April 1, 1878. Thus was born the first museum of the country, under the patronage and financial support of the Government of India.

Considering the fact that among the world's great museums, the British Museum was founded in 1753, the Louvre in Paris in 1870, and the Metropolitan Museum of Arts in New York in 1870, India had not done too badly.

B. The Five Phases of the Development of Museums in India

The development of museums in India can be divided into five distinct phases of growth as follows :

(i) The Early or Company Phase (1757-1858),
(ii) The Victorian Era (1858-1901),
(iii) The Era of Curzon and John Marshall (1901-1928),
(iv) The Pre-Independence Era (1928-1947),
(v) The Modern Phase of the Post-Independence Era (1947-1987).

(i) *The Early Phase (1757-1858)*

The Early Phase of the museums in India began with the endeavours of the Asiatic Society of Bengal, which had devoted itself to the study of all aspects of Indian life. The Society undertook the task, first, out of a natural curiosity to know all about the new land where Europeans had come to work and live for a while, and, secondly, for the practical ends of ruling the land. The Society had gradually assembled some collections of a miscellany of materials of its diverse interests, bearing upon languages and literature, flora and fauna, minerals and geological specimens, and the like, besides art and archaeology. It had, therefore, to house the growing holdings properly for study and reference, for they soon outgrew the limits of their spatial limitations. They had also to be sorted out, preserved, documented, studied, published and displayed.

The founding of the Asiatic Society was largely possible because of the support of Warren Hastings, the then Governor General of the small territorial limits of the English in India. Warren Hastings dominated the scene for 13 years from 1772 to 1786. He was himself a man of an inquisitive bent of mind and fostered the study of Indian history, languages and literature as much for acquisition of knowledge as for equipping the new rulers with a thorough background of the newly conquered land, and its peoples. A marble statue of Warren Hastings of exquisite workmanship, now preserved and displayed in the Victoria Memorial Hall at Calcutta, shows him standing on a pedestal and dressed in a Roman *toga* with a *maulvi* and a Brahman *pundit* flanking him on either side. The statue was designed no doubt to glorify Warren Hasting's interest in Indology. It also symbolises the attitude of the ruling power towards India and her resources. Fortunately, however, he enjoyed the academic support of Sir William Jones, who laid the foundations of Indological studies in India.

While Warren Hastings was active in his support of Indological studies, his successor, Lord Cornwallis (1786-1792) was haughty, and indifferent towards the preservation and study of the Indian heritage and ethos. He, nevertheless, did not discourage it either, nor did he withdraw the moral support to the undertakings of the Asiatic Society.

Meanwhile the Oriental Museum continued to grow under the patronage of the Society. But James Prinsep's appeal in 1837 to set up a *National Museum* did not meet with a favourable response from the Government of the day. The Society made another vain effort in 1856 to persuade the Government to set up an *Imperial Museum* at Calcutta. It was, however, in 1866 that the Government relented somewhat and agreed to rename the Society's museum as the Indian Museum, under the newly passed Indian Museum Act of 1866, and left the management to a Board of Trustees. This Act legalized its status as a private institution (autonomous body under the present system). It was, however, constantly plagued by shortage of funds. From the very beginning the museum was conceived of as a multi-purpose museum from the variegated nature of its collections. It has retained its character to this day, and has the following sections: (1) Archaeology, (2) Art, (3) Industry, (4) Zoology, (5) Geology and (6) Anthropology, respectively. In 1840 a Museum of Economic Geology was founded in Calcutta, and, it remained in the premises of the Asiatic Society till 1876. It had been set up with the purpose of developing the country's economic resources, as a result of the encouraging outcome of the opening up of the coal mines of Raniganj in West Bengal. The bias of the collection in favour of acquisition of knowledge can be easily discerned, but the educational prospects or potentialities of the museum were hardly recognized or explored.

It may be interesting to record the steps that were being taken about this time for the promotion of education in general. A Madrasa was founded in Calcutta in 1781 for the study of science. A college for the study of Sanskrit was founded by Lord Cornwallis at Varanasi in 1791. The Fort William College was opened in Calcutta in 1800 by Lord Wellesley. The fostering of education among the Indians or the pursuit of education *per se* as a responsibility of the Government was not recognized until many years later. As a result there was no chance for museums being conceived of in modern fashion at this early stage of their evolution in India as an educational institution by itself or as an adjunct of an educational institution.

It was only in 1813 that it was decided for the first time that fostering of education among the masses should be a responsibility of the Government. A sum of Rs. 10,000 was also sanctioned for the purpose.

It was 22 years later in 1835 that it was decided at the instance of Lord Macaulay, Law Member of the Governor General's Council, to give Indians the benefits of the English language by its introduction as a subject of study in the Indian colleges. But it was intended to serve the purpose of the ruling power and to make Indians help the substenance of governance by an alien power. Under such auspices it was scarcely to be expected that the Government intended to make the museums actively serve the cause of education of the Indian people. There was no prospect, therefore, of the Government adopting a policy of establishing museums through the length and breadth of the country. The idea itself had not yet taken root.

In retrospect, it would be interesting to recall the avowed purpose of these educational institutions founded by the alien power as recorded in the minutes of Lord Wellesley in regard to the Fort William College:

"The civil servants of the English East India Company can no longer be considered as agents of a commercial company; they are, in fact, the ministers and servants of a powerful sovereign." The preamble of the Regulation by which the College was set up stated that those who came out as youths, aged 16 to 18, without special preparation, "should possess a competent knowledge as well as the laws, Government and Constitution of Great Britain, as of the several native languages of the Hindoostan and the Deccan, and of the laws, usages and customs of the provinces which the said civil servants respectively may be appointed to govern."

The museum movement, therefore, progressed very slowly and not as a result of any deliberate educational policy to utilize them for the purpose until many years later. During the *first phase*, the growth of museums was rather slow, primarily because the public were not much enthused owing to their mental reservations after the trauma of the then recent revolt of the Indian Army and their misgivings about the alien rulers. The motivation had, therefore, to be provided by the government of the day or the learned societies, which were burdened with their collections of manuscripts, handicrafts and the like and felt morally responsible for housing and preserving them for posterity.

As museums were non-profit making, and, therefore, wasteful from the commercial point of view, they occupied a low priority in the scheme of Government's development plans. As a result, not more than five museums came up during the period.

(ii) *The Victorian Era (1858-1901)*

The Government then came forward to set up museums of a general character or multi-purpose museums, as they are called, at the provincial capitals for very much the same reasons which had led to the foundation of the Asiatic Society in 1784. The year 1861 witnessed the constitution of the Archaeological Survey of India, recognising the need to put archaeological investigation on a firm footing. The tireless efforts of the first Director General, Major General Sir Alexander Cunningham, led to the discovery of a large miscellany of archaeological materials. These found their way into the nearest extant provincial museums or to the Indian Museum at Calcutta which was of course the capital of India then. Cunningham succeeded in salvaging a major part of the standing remains of the 2nd century B.C. Sunga *stūpa* at Bharhut in Madhya Pradesh and presented them to the Indian Museum. The labelled sculptures on the railings of the *stūpa* are one of the richest treasures of the Indian Museum. Of course if the *stūpa* could have been maintained intact *in situ* it would have served excellently as a model site museum in the open air.

About half a dozen museums grew up during the first two decades (1858-1878) of the second phase and among them the most remarkable is the Government Museum at Mathura (1874) built around the nucleus of a large collection of Mathura sculptures made by a private individual, thanks to the enthusiasm of a British Collector, F.S. Growse. These sculptures had been recovered from the mounds of Mathura as a result of random diggings by all and sundry for various purposes. But Government was not much impressed by Growse's solicitude for the museum movement and he was unceremoniously transferred from Mathura to obscure Bijnor for the fault of his obsession.

The Golden and Diamond Jubilee years of Queen Victoria in 1887 and 1897, respectively, led to the founding of several museums, often associated with her name. Among them features the Victoria Technical Institute at Madras as a museum of crafts. The idea of the Victoria Memorial Hall, which eventually came into existence in 1921, had been conceived of by Lord Curzon as early as 1899, with a great foresight, not merely as a Personalia Museum devoted exclusively to the Queen, as a symbol of British rule in India, but largely as a memento to the British Raj and the British connection with India. One wonders if he had a premonition of the eventual snapping of the ties, after nearly 50 years, in 1947, for he had inadvertently triggered and intensified the freedom movement in India by his infamous partition of Bengal in 1905.

(iii) *The Era of Curzon and John Marshall* (*1901-1928*)

It was not, however, until the appointment of Lord Curzon as the Governor General of India that the museum movement, during the third phase, received a worthwhile stimulus. He felt very strongly that the British Government in India were doing precious little for the preservation of the cultural heritage of the country, and he, therefore, lent full support to all activities towards the discovery and preservation of the rich cultural heritage of this ancient land. The appointment of Sir John Marshall as the Director General of the Archaeological Survey of India in 1902 was a phenomenal event in this direction. He not merely followed the precedent established by Cunningham of enriching the existing museums, but adopted a policy of setting up a chain of archaeological site museums at or near the excavated sites with a view to housing and displaying the excavated remains on the site itself so that the objects were not orphaned by being torn away from their habitat and they could be better appreciated in the

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context of their occurrence. The archaeological site museum at Sarnath (on the outskirts of Varanasi) was the first such museum to be set up in 1910, as the earliest example of the new trend in the territorial limits of present-day India. This policy is still being pursued by the Archaeological Survey and it has more than twenty-five museums under its control and many more are in the offing. Marshall, therefore, may be credited with the idea of setting up site museums with a view to presenting the excavated finds of small antiquities in juxtaposition to the structural remains of the site, so that their role while in use could be understood in proper perspective.

(iv) *The Pre-Independence Phase* (*1928-1947*)

Markham and Hargreaves have succinctly expressed their views in regard to the rationale and justification of site museums in the following words:

"It has been the policy of the Government of India to keep the small and movable antiquities, recovered from ancient sites, in close association with the remains to which they belong, so that they may be studied amid their natural surroundings and not lose focus by being transported . . ."

"Although the population of most of these excavated sites is scanty, the maintenance of these museums is entirely justified for the objects preserved in them are all-important to the student if he is to visualize aright the conditions of life in Ancient India and to infuse life and colour into his picture. But these local museums are justified only if the antiquities housed in them are sufficiently numerous and valuable and if the site is reasonably accessible."

Sir Leonard Woolley, the renowned excavator of Ur in Iraq, was invited by the Government of India in 1939, on the eve of World War II, to make a thorough survey of the activities of the Archaeological Survey of India, and in this connection he had an opportunity to review the work of the archaeological site museums. He was very uncharitable in his views towards the site museums and broadly recommended their closure, mainly on grounds of poor maintenance—a recommendation that was fortunately not accepted by the Government of India.

Even though Woolley had recommended the closure of the site museums his cynical criticism was also suggestive of the remedies of the obvious deficiencies. In his day many of these museums were in inaccessible interiors, but the situation has totally changed to day. All these places have been put on the tourist map and have been rendered accessible, with the lone exception of the island museum of Nagarjunakonda. Though it is much more accessible now as a result of the introduction of a ferry service, which does not ply round the clock, and the staff posted at the museum are, therefore, completely isolated from the rest of the world. Though the curatorial and clerical staff have a chance of earning promotions and a shift, the watch and ward staff are rather helpless and as a result may be rendered listless and apathetic uuless their service conditions are rendered otherwise attractive, so that may continue to be serviceable and useful to the visiting public.

पुस्तकालय

The valid criticism in regard to the unsuitability of the buildings, or inadequacies of displays and labels has since been met by the construction of new buildings on well-designed architectural plans, and improved displays. The training of the curatorial staff has also been improved so that they may be more helpful in general to the visiting scholars.

The strong criticism of Woolley in the following words, "the proper "surroundings and perspective" which appeal to him (the scholar) are the facts of stratification and association recorded in the reports of excavation, and as soon as the objects have been removed from the earth and put on a museum shelf it does not matter whether the museum is a hundred yards or two hundred miles from the excavated site" has some validity and emphasizes the need of early publication of the excavated reports so that the objects might be put on display at the concerned site museum. This alas is not the case, as the case of Kalibangan, where the excavations had ended in 1969, shows. The report, unfortunately is nowhere in the horizon. But the view that "the antiquities of Harappa could be studied with infinitely more profit in, say, New Delhi, within reach of libraries and comparative material, than in an isolated shed at Harappa," is a trifle overdrawn and is totally unfair to the general public, some of whom are well informed and no less inquisitive and would spare no pains to visit the ancient site. But the lament that "the scholar who is forced to go out into the wilderness to see the original objects works at a disadvantage in that he works without his due equipment" holds good. The remedy should lie in the provision of a collection of books including excavation reports and facilities for consultation, as well as some arrangement for the stay of the scholars near the museum. The latter need not, however, be the responsibility of the museum.

There is no case, however, for the dispersal or distribution of important antiquities as in the case of Nalanda bronzes or the Indus seals, though such distribution has already taken place in the past. In fact, further dispersal of the Nalanda bronzes from the site museum at Nalanda on the basis of a decision of the Central Advisory Board of Museums had to be halted by a successful appeal to the Government for the reversal of the decision at the author's instance. This was done in view of the fact that no two Nalanda bronzes are exactly alike, each having been made separately by the *cire perdue* process, and the dispersal would have deprived the scholars and viewers in general of the opportunity of looking at the totality of the collection at one place, besides throwing them out of their perspective and surroundings.

Woolley's suggestion, endorses Markham-Hargreaves' remarks about the inadequacy of the training of the curators. Considerable work has since been done to remove or reduce the deficiency, and one would expect that the curators today are not merely sound scholars themselves but are also available to the foreign scholars and the general public and have done their best to make the site museums function as education centres.

The site museums have made considerable progress and have also been increased in number on the lines of the reorganisation planned and implemented by Wheeler with suitable readjustments of jurisdiction of the supervisory staff and improvement of scales of pay and augmentation of man power, though there is further scope for improvement in all these matters.

In 1965 Government appointed a Committee headed by Sir Mortimer Wheeler to review the activities of the Archaeological Survey of India. Its recommendations in regard to the site museums are worthy of consideration in this context.

"Site Museums are an important addition to sites which are themselves of instructional interest, sites such as Delhi Fort, Sarnath, Nalanda or Sanchi. But a Site Museum difficult of access and situated half a mile from a site of which nothing can be seen above ground is almost valueless. The site in question is Kondapur in Andhra Pradesh, where a Curator of the Survey has been at some pains to arrange a Site Museum which very few people are ever likely to visit. It is essential that a site be worthy of its site museum."

It is true that the basic criteria for justifying a site museum comprise (1) adequately numerous small finds, (2) impressive archaeological or structural remains at the adjacent site, and (3) accessibility of the site and museum to the visitors. From these points of view the site museum already set up near the site may not have instant justification. It may be recalled that the ancient mound stands to a height of about 8-10 metres above ground level indicating considerable potential and that it was only partially excavated in 1941. Even the partially excavated finds speak of an impressive cultural history of the Satavahana period ranging from the 2nd century B.C. to 2nd century A.D. It were these finds which had prompted the Hyderabad Archaeological Department to set up the museum. The remedy lies not in closing the museum as the Review Committee had suggested by inuendo, but in excavating the site carefully and completely and, if the finds were to justify the continuance of the museum, to take steps for making the site more accessible to visitors. It is these arguments of the author, in his capacity as Director (Explorations) in the Archaeological Survey of India, which won the case for a new lease of life for the museum which had otherwise been doomed to death. Luckily for all, the museum is still alive, and the excavations are awaited.

One of the important museums set up by the Archaeological Survey of India under the auspices of Marshall was the Central Asian Antiquities Museum in 1929 at New Delhi to house the excavated remains gathered by Sir Aurel Stein, a Hungarian Officer of the Archaeological Survey, in the course of three campaigns in the beginning of the century. It is now part and parcel of the National Museum, but constitutes one of the world's six great collections of Central Asian Antiquities.

By 1912, when the museum situation in India was reviewed by J.Ph. Vogel, then Acting Director General of the Archaeological Survey, the total number of museums was thirty-nine. The upward trend gained further momentum during the next twenty-five years between 1912 and 1936. When Markham, Secretary of the British Museums Association, and Hargreaves, then Director General of the Archaeological Survey of

India, made a survey of the museum movement in India in 1936, the number of museums, including those now in Pakistan, had gone up to one hundred and five. Though the museum movement had taken a phenomenally upward swing between 1912 and 1936, the Markham-Hargreaves Report lamented the poor maintenance of the Indian museums, blaming it on the lack of training of the Indian curators, and inadequate finances.

The war years, between 1939 and 1945, marked a set-back to the museum movement as to every other activity in general as a global phenomenon. Meanwhile, Mortimer Wheeler was appointed as Director General of the Archaeological Survey of India in 1944, even before the war had ended, for a period of four years. He found that the museums under the Survey were till then being looked after by the Superintending Archaeologists of the circle offices and suffered considerable neglect in consequence in the midst of their other pressing duties, particularly in regard to the conservation of monuments which rightly claimed their primary attention. He reorganised the site museums under an independent Museums' Branch and placed it under the exclusive charge of its own Superintendent so that the site museums could receive better attention and supervision.

Wheeler (1944-48) and the subsequent Directors General of Archaeology, predominantly A. Ghosh (1953-1968), continued the time-honoured liberal policy of enriching the other museums of the country, including those of the Universities, with gifts of archaeological finds. The site museums have, therefore, served as a major source of authentic and stratified archaeological materials to the museums of India in general.

(v) *The Modern Phase* (*1947-1987*)

India entered into the latest phase of her museum movement with the attainment of Independence in 1947. Under the new Constitution that was adopted on the 26th January, 1950, museums as a subject were placed in the State list implying that it was for the primary responsibility of the 'States' to set up museums and maintain them. This did not, however, deprive the Central Government of their right either to finance and run the existing museums under their charge or even to set up new museums, or finance State, private, university or institutional museums.

Just as the regime of Sir John Marshall (1902-1928) witnessed the birth of archaeological site museums and their efflorescence, the post-Independence period marked a phenomenal growth of museums in general covering many different disciplines and ushering in an era as well of *national museums*.

Markham and Hargreaves in their classic report of 1936 had recommended the setting up of an *Imperial Museum* and the appointment of an *Inspector General of Museums*. It was, in fact, a revival of the idea of James Prinsep for a national museum. But Markham-Hargreaves' idea was too simplistic and did not consider the difficulties of management of thematically and academically divergent disciplines. For this purpose one of the basic prerequisites would have been the bringing of all museums, envisaged under the scheme, under a unified administrative and financial control. That this was not done was for the obvious difficulties that the scheme implied as well as on account apparently of the financial constraints imposed by the war.

The All India Oriental Conference in 1937 had formally recommended the setting up of a *National Museum.* And the idea was taken up by Woolley in his Report of 1939, in which he suggested the foundation of a *Central Museum* in Delhi with a bias on archaeology. He had also strangely recommended the construction of the new museum building inside the walls of Firoze Shah Kotla on the grounds of availability of space, also for gardens and playing fields, proximity to old Delhi, (comparative) freedom from dust and noise (he had not anticipated the partition of the country or the advent of refugees and the phenomenal growth of population and traffic) and isolation, privacy and safeguard and security.

As pointed out earlier the lean years of the Second World War (1939-45) have had their impact on the development of museums in India and Woolley's idea of 1939 remained in cold storage for years.

Wheeler, in his capacity as Director General of the Archaeological Survey of India (1944-1948), took up the idea afresh and formulated a scheme for a Central National Museum. The proposals were finally approved by a Committee headed by Sir Maurice Gwyer, former Chief Justice of India, and then Vice-Chancellor of the Delhi University, in 1946. It had envisaged an autonomous organization under a Governing Body consisting of 55 members. It was to have five Departments, namely, (1) Art, (2) Pre-historic Archaeology, (3) Historical Archaeology (Buddhist, Jaina, Brahmanical), (4) Numismatics and Epigraphy, and (5) Anthropology. It was to be equipped with a Library, a Circulating Department, and a Chemical Laboratory. It also stipulated that "the Director must be a scholar with special knowledge of one or more branches of the Museum's work, and with approved experience of museum administration."

The National Museum ultimately came into existence in 1949, to begin with in the Durbar Hall of the Rashtrapati Bhavan. It later shifted to its own building in 1955, then still under construction, and was thrown open to the public in December 1960. This was indeed an event of great significance in the history of the museums in India.

A. Ghosh, in his capacity as the Director General of the Archaeological Survey of India (1953-1968) was primarily responsible for the setting up of the National Museum in its incipient stages, and looked after the young institution from its inception in 1949 to 1957 as a wing of the Archaeological Survey of India, contributing its nuclear archaeological and sculptural collection, and building it up with men, materials, equipments and objects, besides academic and technical expertise and dedication. He saw through its initial entrance into its own building and laid the foundation of its administration.

Meanwhile, certain other developments had strengthened the museum movement. The Museums Association of India was founded in 1944. It provided the museum profession in general with a forum for the exchange of views, news and ideas, and its annual discussions on specific topics enabled it to highlight the nagging problems and offer as well as invite suggestions for their solution. The annual *Journal of the Museums*

Association of India and the occasional *News Letter* also filled a large lacuna for the benefit of the museum professionals.

The Central Government set up a Central Museums Advisory Board in 1956, for surveying the progress of the museums in India, and further help the movement with constructive criticism and moral and professional support.

On the international scene as well, UNESCO, set up in 1946, constituted the International Council of Museums in the same year and it enrolled members among the States parties to the U.N.O. It provided the professionals with an international forum, especially after the setting up of the Museums Division in 1949. Its journal, 'Museum' which had started appearing in 1948, is the purveyor of latest advances in museological knowledge and technique of international standards on a global level. India joined the Council at the very outset and has been a beneficiary, also as a participant at the triennial general meetings of the ICOM or at periodic symposia on specific subjects. All these have helped to strengthen the museum movement in the country tremendously.

Museum objects by and large are bedevilled by the problems of preservation against the ravages of time, climatic vagaries, vandalism and numerous other causes. With a view to standardizing and internationalising the methods of examination and treatment of museum objects of a diverse variety existing in the most varied climatic conditions, the UNESCO set up in Rome a Centre for the study of the preservation of cultural property in 1959 and later another such laboratory at Brussels. Fellowships were also instituted for imparting training to museum personnel in conservation. While these go a long way towards filling a lacuna, the effort is perhaps too little in the context of the complexities and vastness of the problems of conservation in general all over the world. It was with this purpose that Government of India began strengthening the conservation laboratory of the National Museum at New Delhi and the Rome centre recognized it as far back as 1965, and strengthened it with financial help for equipments, as an outpost for training the museum personnel in conservation methods in South Asia. In 1971 it was formally recognized as an authorized centre for the training of conservation personnel in the region. Government of India set up in 1976 an independent National Research Laboratory for the Conservation of Cultural Property (shifted to Lucknow) for the twin purpose of research and training. This is another landmark in the museum movement in the country. Nevertheless, the number of conservation laboratories in India is far too small in comparison with the actual needs in spite of daily reports of valuable art objects languishing for lack of facilities for their conservation.

The lack of facilities in India for training in museological methods in general was another hurdle on the way of development of museums. It was not until 1952 that the University of Baroda introduced a two-year course in Museology for professional purposes, and the Universities of Calcutta and Varanasi (BHU) and the Technology Institute at Pilani followed closely thereafter. The Aligarh Muslim University and the Birla Museum at Bhopal also introduced diploma courses and together they can all produce about thirty professionals in an year. This has indeed been of some help to the museum profession.

The Archaeological Survey of India's diploma course in Archaeology, which begun in 1959, also includes the subject of museology. Some museums like the National Museum and the Indian Museum have also introduced in-service refresher training courses for their own personnel as well as those from outside.

The Ministry of Education of the Government of India introduced in 1963 a ten-day annual practical training programme on specific subjects for the junior and middle level museum professionals with the help of experts in the field from all sources in well organised Museum camps on specified topics. This serves as a supplement to their in-service training in their respective institutions. Seventeen such camps have been organized so far as detailed below :—

Sl. No.	*Theme*	*Year*	*Venue*
1.	Indian Sculpture	1965	Madras
2.	Indian Paintings	1966	Varanasi
3.	Decorative Arts	1967	Bombay
4.	Education and Presentation	1968	Calcutta
5.	Techniques of Exhibition and Documentation with special Reference to Arts and Cultural Anthropology	1969	Lucknow
6.	Museum Techniques on Exhibition, Storage, etc.	1970	New Delhi
7.	Pre-history, Physical Anthropology and Natural History	1971	Baroda
8.	Children's Museum	1972	Jaipur
9.	History with Special Reference to Collection and Display	1973	Hyderabad
10.	Museum as a Source of Diverse Branches of Knowledge	1974	Bangalore
11.	Communication with Audience : Child, Adult Rural, Urban, Illiterate and Literature on Museum Techniques	1975	Calcutta
12.	Legislative Enactments, Museum Rules and Standing Orders and other Administrative Norms affecting Museum Development in India	1977	Bhubaneshwar
13.	Protectionof Movable Cultural Property	1978	Hyderabad
14.	Management of Small Museums	1980	Panaji (Goa)
15.	Documentation and Publication	1982	Trivandrum
16.	Museum and Community	1983	Varanasi
17.	Museum and the Cultural and Natural Environments	1984	Calcutta

In retrospect it may be observed that museums in India began with an emphasis on art and archaeology, in combination with other disciplines of Natural History, Geology, Anthropolgy and Industry, in a somewhat subdued role. The very first museum of India, namely, the Indian Museum was one such museum. The provincial museums that were set up in its wake followed the same pattern. The case for exclusive museums for the different disciplines was not recognized until after Independence. There was no Science Museum in India until 1954, when the Birla Technology Institute set up a Science Museum at Pilani (Rajasthan). The Council of Scientific and Industrial Research set up its first Science Museum, namely, the Birla Industrial and Technological Museum, at Calcutta in 1956, and others have come in its wake and the Science Museum idea has taken off as a visual and operational supplement to curricular instruction in schools as well as for acquainting the people in general with the basic scientific principles and India's progress in scientific and industrial research and their role in our daily life as well as in industrial development. These Science and Technology Museums are now under the National Council of Science Museums constituted by the Ministry of Human Resource Development in 1978 under the overall supervision and control of a Director General. It has already set up science and technology museums in Bangalore, Bombay and Patna and one more is coming up in New Delhi. These and other small museums of science and technology set up by the National Council has taken the country by storm. All this progress marks a signal development in the field of museums in India. The National Council is also a successful experiment as an autonomous body.

Natural History Collections formed only sections of large general museums until 1972, with the exception of the Zoological Museum under the Municipal Corporation at Ahmedabad, when the National Museum of Natural History was begun under the Department of Science and Technology at New Delhi. It has now come fully into its own, though in a rented building, and is now under the control of the Department of Environment. It has made a mark as an institution of education and entertainment. Its latest contribution would be an open air museum on a low artificial hillock alongside the V.I.P. Road, opposite to Salt Lake at Calcutta, where it proposes to set up scale models of the material remains of the Harappan civilization and of tribal life.

Anthropolgy in its diverse ramifications of Physical, Cultural and Social Anthropology suffered the same ignominy as the Science and Natural History Museums. Though the discipline did receive recognition as a section of the Indian Museum from the inception, it was only the University Departments and two Tribal Research Institutes at Ranchi and Calcutta that maintained exclusive museums, obviously on a small scale. It was only recently that the Anthropological Survey of India has been entrusted with responsibility for setting up and maintaining Zonal Museums of Anthropology with a large Museum at Bastar and several others in the offing. But the National Museum of Man, as the apex anthropological museum in India, is coming up independently at Bhopal under the direct control of the Department of Culture.

Though art and archaeology museums have dominated the museum scene in India for a long time, ever since the inception, it is the Science and Technology Museums and the Natural History Museums that have now stolen the lead, because of the larger scope such museums have for adoption of the latest scientific methods for the preservation of their objects, their easier interaction with schools, as actively cultivated by them, for educational and recreational programmes, facilitated also by their comparative freedom from the inhibiting problems of security, giving them much larger scope for interactive and functional displays, not to speak of personal factors of the dedication, competence experience and accessibility of the persons involved with their development, at all levels.

In 1960 Government of India selected Dr. Grace Morley, then head of the Museum Division of ICOM in Paris, to be the first Director of the National Museum, but all the museums in India benefited a great deal from her rich experience and her indefatigable energy to travel and willingness to help during her years as Director till the end of 1966. Shortly, thereafter in December 1967 the ICOM opened a Regional Agency for South Asia in New Delhi and put her in charge. She continued with renewed vigour to promote the cause of museums in India and in all South Asia in this capacity until her retirement in 1979. She continued to stay on in India till her death in January 1985, and dominated the museum scene in India like a colossus throughout her life. The contribution of Dr. Morley to the development of museums in India is invaluable.

The ICOM Regional Agency provided Indian museums and museum personnel with a living link with the international museum world of the ICOM, and enabled all concerned to make day-to-day consultations on their problems, attend professional meetings organized by the ICOM, contribute papers and communicate their achievements to the ICOM. It has, however, been shifted from New Delhi to Bangkok, bringing in its train all the disadvantages to the Indian museum personnel and profession in general.

The authorities which own, control or manage museums in India today comprise in the main Central and State Governments, Municipalities, Universities and Educational Institutions, Learned and Research Societies and private trusts. The total number of museums today is approximately four hundred, but this figure stands in sharp contrast to five hundred museums in Japan and seven hundred museums in West Germany, not to speak of the seven thousand odd museums in the U.S.A. The institution of Cultural Exchange Programmes with many advanced countries and the setting up of a Joint Museums Committee under the Indo-U.S. Sub-Commission on Education and Culture, have further helped to strengthen and improve the character of museological work in India through various joint programmes under its auspices.

The recent Festivals of India,* driving all categories of museum disciplines into service, have brought up to public view, thanks also to Door Darshan, the total character of modern museums. They have also demonstrated despite some contra-indications how effective museum methods can be in achieving even their limited objectives, namely, dissemination of knowledge without pain and promotion of understanding of the nation's total ethos among total strangers, not to speak of achieving even political and economic gains to boot in the bargain. Even the *melas* and shops organised by the festival are extended but normal functions of museums. Museums in India have come to stay and their future is bound to be prosperous. But festivals of the kind that have been held in recent years cannot be an unmixed blessing or without their negative side, and the subject has been dealt with elsewhere.

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* The rationale of the Festivals of India has been discussed in a later Chapter.

Wheeler, on assumption of office as Director General of the Archaeological Survey of India in 1944, had recommended the constitution of a Central Advisory Board of Archaeology for advising the Government on all matters relating to archaeological work in the country in a coordinated manner. On the analogy of the Central Advisory Board of Archaeology and in view of its proven utility, Government constituted a Central Advisory Board of Museums in 1956 for the purpose of seeking its advice on all matters relating to the development of museums, the promotion of contacts and coordination among museums of diverse disciplines and under the ownership, control or management of different authorities such as the Central Government, the States, Universities, private trusts, municipalities and the like, as well for soliciting the cooperation of the public with the activities of the museums. The Board functioned on a three-year term. The term of the Board, last constituted in 1969, expired in 1972. For some reasons the Board was not constituted again for several years, till efforts were made for its revival and reconstitution in 1976. Even these endeavours proved abortive. It has been reconstituted again in 1987, after a lapse of 15 years. The Board provides another forum where the museum professionals, the controlling authorities as well as the public can freely discuss the problems affecting the functioning of museums in India and suggest ways and means for their improvement and development. The constitution of the Board is, therefore, another landmark in the history and development of museums in India.

With better prevalent facilities for training in the techniques of museology and for exchange of technical information on a global basis as a result of the activities of the ICOM as well as bilateral exchanges between India and foreign countries with higher standards of museum keeping, as well as with the better placed museums in the country itself, there is better scope now for the development of museums in India. Finances, however, constitute a hurdle and a handicap. Apart from the fact that the levels of awareness of the significance and importance of museums are not uniform, the inadequacy of funds stands in the way of development of the small and private museums. With a view to offering some financial assistance to such museums in duress the Department of Culture set up a fund and constituted a Museums Grants Committee to consider in depth their requirements and release some funds for a variety of purposes such as (i) acquisition of objects, equipments for (a) documentation, (b) presentation, (c) conservation; (ii) purchase of books for the library; (iii) publication of catalogues and monographs on the museum's holding, and (iv) even for additions and alterations to the already existing museum buildings. The fund at the disposal of the Committee was rather meagre to begin with but has been substantially raised now, easing the situation to a considerable extent. The funds have been augmented considerably and placed in the hands of the newly appointed Director General of the National museum.

In recent years the UGC too has come forth with liberal grants for the development of the museums of the Teaching Departments of the Universities as well the full-fledged multipurpose University Museums such as the Bharat Kala Bhavan, Varanasi or the Asutosh Museum of Indian Art, Calcutta.

As a result of the interaction of all the factors discussed above museums in India are much better placed than ever before and are, therefore, better poised for proper growth and development. A consideration of the development of museums from stage to stage would itself provide an index of the rationale of the phenomenal achievement.

3

The Curator and His Training

A. General

The immense and variegated responsibilities of the Curator have been referred to earlier (p. 7). Yet almost no formal effort had been made for many years for their training in the discipline of museology. In fact, the word museology itself was unheard of before the fifties of the present century, even though the need for the training of museum men (persons) and the evil effects of the lack of it had been felt much earlier. Even today the subject is considered unimportant by the very persons who enjoy the fruits of museum keeping and by others without themselves shouldering the responsibilities of running museums, or shouldering any of the concomitant burdens and tensions. There is a feeling among some authorities that a museum must be headed by an established scholar, regardless of his possession or otherwise of any expertise in museum work or even a liking or aptitude for such work or even any interest in the involved administration. The importance of general scholarship cannot be denied. But it must be ensured that the *great scholar* who may be put in charge of a museum has had reliable experience of running a museum as also the right temperament to build up his juniors and potential successors in all branches of museological and curatorial work. He should not merely busy himself with the advancement of his own scholarship and reputation. If this is not done the person himself may win laurels for himself for his academic eminence, but the institution will not grow or prosper.

The successful running of a museum requires not merely deep scholarship on the part of its head in one or more disciplines which the museum serves, but a temperament to shoulder responsibilities and build up and develop an institution in all its fields by a spirit of self-sacrifice on the strong base of a sound museological training and practical experience.*

Museology is a methodological matter and it is a fallacy to think that it comes naturally to 'scholars', for it consists of many different activities, including administration and dealing with staff and the public, setting up of galleries, mounting of exhibitions, conservation of cultural relics, and ensuring the safety and security of the objects under his sacred charge, besides research and academic work belonging exclusively to the scholarly field, and publication of sorts. It also implies the capacity to enforce discipline among all concerned with the use of tact without surrendering firmness. But a good deal of the work is pure housekeeping, and it is good housekeeping that makes all other museological activities, including pursuit of knowledge and research, inculcation of information and education and conveyance of visual and vocal delight, possible. In today's context a museum is also a cultural institution as repeatedly emphasized. The successful running of a cultural institution depends as much on temperament as on training in public relations and handling of a large miscellany of modern technical gadgets and their maintenance. No doubt much of it is commonsense. It must, however, be admitted that commonsense is not common enough. It has to acquire familiarity with all the fields of a curator's work.

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* The Gwyer Committee in its report (1946) on the setting up of a Central National Museum at Delhi, stipulated that "The Director must be scholar with special knowledge of one or more branches of the Museum's work, and with approved experience of museum administration. Upon his energy and enterprise the utility and reputation of the Museum will mainly depend."

B. Early Efforts to Introduce Training Courses

The first all India conference to consider the problems of museums in India was held at Calcutta in 1907 under the auspices of the Government of India. Among the problems discussed therein was the need of the training of 'taxidermists', keeping in view the more insistent requirement of the fast deteriorating zoological specimens in the early collections of the museums, and the greater importance attached to the work of preserving zoological specimens than to stone sculptures which did not require any such attention. But the subject of the general training of curators does not seem to have come up for any serious consideration at this Conference. The matter of preserving the objects collected and stored in the museums was, nevertheless, engaging the attention of the authorities concerned, particularly the handling of organic objects which were prone to rapid decay and degeneration (bio-deterioration). No concrete proposals seem, nevertheless, to have emerged at the Conference.

The second all India Museum Conference held to review the situation of the standards of museum-keeping in India, and the need for engaging properly trained curators was held by the Government of India in January 1912 at Madras. This shows, if anything, that Government was quite conscious at the time of the lacuna in the area.

Resolution No. XV passed by the Conference expressed the view : "That the Conference desires to express in the strongest possible manner its conviction that the different branches of provincial museums should be under expert management, and that no exhibition of specimens can have much educational value unless it is arranged and supervised by a man who has made a special study of the class of objects of which it consists."

This at once underscores the early public recognition by the Governmental authorities of the need for proper training in museum management and deep knowledge of the concerned disciplines represented by the holdings of the museums on the part of Curators or Directors of such institutions.

Nevertheless, no concrete effort appears to have been made by any authority till the Markham-Hargreaves report* on the *Museums of India* had made a scathing condemnation of the museums of India as they stood in 1936 and emphasized the need in particular for the training of the museum personnel. The report drew a very gloomy picture of the condition of maintenance of museums as was prevalent about fifty years ago in 1936. No words can be more damaging than the statement, "The bulk of the smaller museums are in the hands of *untrained or ineffective curators whose incompetence is matched by their laziness and indifference*." They added further that "Broadly speaking the standard of curatorship (in 1936, in India) compares poorly with that of North-West Europe, Northern America and comparative portions of the British empire. In scarcely a single museum in India is there any adequate knowledge as to the way in which manuscripts, textiles, pictures or woodwork should be preserved or exhibited." It is amazing to contemplate that the British rule in India that was responsible till 1947 for almost anything and everything that happened in India, were aware of the situation and yet did nothing to rectify the situation. The criticism of Markham-Hargreaves falls, therefore, squarely on the masters.

Fortunately, however, even at such an early date of the museum movement in India Markham and Hargreaves described the desired qualifications of the Curator by quoting from the writing of Sir Henry Miers in his *Report on the Museums of the British Isles*, 1927, as follows: "Besides a liberal education and a technical training and administrative ability *he should have some knowledge of at least one, and preferably more than one of the subjects covered by the museum* (italics author's) : an instinct for scientific and artistic exhibition, a zeal for, and acquaintance with educational work and research; and he should be able and willing to act as a teacher.

Very rarely are these qualifications to be found in one person and many appointments are made without much regard to them. Fortunately an able young man with real enthusiasm for the work can find materials in the museum itself for his own education and some of our learned Curators have acquired their knowledge in this way in the museum itself for his own education. But in a scientific or archaeological museum knowledge is needed of the subjects which only exceptional men or persons with a real passion for the work can acquire in the midst of strenuous duties; languages, biology, history, science, etc., are subjects of which the foundations are laid in youth and it is in an University *degree course* that the necessary preparation is most likely to be found. Moreover, a university training course gives that *insight into research* which is so needful if a museum is to keep abreast of modern ideas and if its treasures are to be made useful and available."

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* S.F. Markham, then Secretary of the Museums Association, London, and H. Hargreaves, retired Director General of the Archaeological Survey of India, were requested by the Government of India, to look comprehensively into the museums of India and prepare a report on the situation and to recommend remedial measures. Their report was published by the Museums Association, London in 1936 as the *Museums of India*. It is interesting to record that this undertaking received the financial support of the Carnegie Corporation of New York, U.S.A.

These are indeed very helpful guidelines and we have to see how far we have conformed to those ideals or deviated from them and for what reasons in the matter of the training of the in-service candidate, maybe a fresher, but surely, a prospective museum personnel.

With the realization of the need to have properly trained curators for the museums in India the next All India Museum Conference to consider the problems comprehensively was convened by the Government of India at New Delhi in December 1937.

The resolution passed by the conference in regard to the training of the Curators drew attention to the resolution No. XV of the 1912 Conference referred to earlier. This ran, operatively, as follows : "The position of Curators in India is far from satisfactory. Practically no arrangements exist anywhere in the country for their training, while facilities or opportunities are rarely provided for further training or studies, the visiting of other museums for gaining first-hand knowledge of the advances made and the programmes of work followed for making such institutions more efficient and useful. In view of the above, the Conference recommends that arrangements be made for :

(a) *initial training* as Curators by starting in the larger museums of the country *training centres* in various branches of museum work;

(b) *refresher courses* at regular intervals;

(c) *facilities for the curators to visit other museums in India* from time to time, and in special cases for the grant of *leave for study in foreign museums*; and

(d) setting up an *Expert Committee on Museums* to advise in regard to the qualifications and training of curators and other cognate objects" (italics of the author).

The late Sir Leonard Woolley, the well known archaeologist and excavator of Ur, was invited by the Government of India in 1939 to look into the working of the Archaeological Survey of India. In the course of his review he examined the site museums of the Archaeological Survey as well. He recommended that since the museums or the staff employed in them were not fit or competent to discharge the three basic duties of museums, namely : (1) proper housing and preserving of the antiquities, (2) furtherance of the advance of science through studies by the staff or by offering facilities to foreign scholars, and (3) serving as educational centres for the general education of the public, *the museums should be closed down*. By innuendo he pointed to the general incompetence of the staff, apart from poor maintenance of the museums (as already referred to in Chapter 2 above). The incompetence of the staff could be attributed to lack of training, lack of proper guidance from the top, and lack of experience and enthusiasm, as already pointed out by Markham-Hargreaves in 1936. It is sad to reflect that he did not make any positive recommendation in regard to the training of the staff, even out of deference for the views of Markham and Hargreaves or in the interest of the museums. It appears he was obsessed against the museums *per se*, and did not go into the merits of the case from a constructive point of view. Fortunately, however, the thoroughly biased and rather subjective advice of Woolley in regard to the Archaeological site museums was not accepted by the Government.

The years rolled on and the training of museum personnel did not receive any further measure of attention from the Government until 1959. In that year the Archaeological Survey of India set up in their headquarters office at New Delhi a School of Archaeology. This was done with a view to training up a small band of basically sound candidates in all aspects of archaeological work, including museology to serve as recruits for the expanding archaeological work in India. In fact, it was the formalization of the periodic training camps introduced by Wheeler in 1944 at the major sites of excavations undertaken by the Excavations Branch of the Survey. The training camps were tentatively but quite meaningfully designated by Wheeler as the 'Indian School of Field Archaeology', when he had started it at Taxila in the winter of 1944.

The course of training originally designed for the 'School' was for 20 months* and it was open to candidates who possessed an M.A. degree in a relevant subject. Only 10 candidates were admitted to the training after a rigorous written and *viva voce* test on their knowledge and potentialities. The idea was to build up bands of competent archaeologists to serve as a corps for recruitment to the Archaeological Survey of India, the State Departments of Archaeology and the Universities.

The course includes one paper on museology, in the fitness of things, though the relevant syllabus cannot be expected to be as intensive as in a full-fledged course on "Museology".

Within less than 20 years after the departure of Wheeler from India, in 1948, Government of India appointed a Review Committee to review the working of the Archaeological Survey of India, and nominated Wheeler himself to its chairmanship. The Wheeler Review Committee of 1965 did, very briefly, touch the working of the site museums but made no positive recommendation in regard to the training of their curatorial staff.

Barely three years later, in 1968, Government of India appointed a Committee to review the working of the museums of India with a view to seeking its advice on the safety and security of the museums and their holdings. The late Dr. M.S. Randhawa was made its Chairman. It made no recommendations whatsoever on the training of the museum personnel, as any topic other than security was beyond its terms of reference.

Just one year later, in 1969, Government appointed another Committee under the Chairmanship of the late Dr. Moti Chandra to look into the working of all the museums in India comprehensively. The Committee *inter alia* pointedly drew the attention of the Government to the acute shortage of trained personnel in Indian museums, and, therefore, urged the need of training courses to be introduced in some of the major museums to meet the deficiency. It recommended that the National Museum should undertake initial and refresher courses for in-service personnel employed in the various museums.

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* The course has since been condensed (since 1965) and the duration has been reduced to 10 months. It has now reservations on a competitive basis for the Survey and the State Departments, though some seats are filled by open competition. One or two foreign scholars are also admitted. It is now part of or merged with the newly founded 'Institute of Archaeology'.

It further suggested that the training should include museum administration and museum techniques, and that it should be imparted to those who have been in museum service for about 5 years and that the duration of the course should be six months. The Committee also recommended that this kind of training facilities should be made available at two or three centres in India for different disciplines, and it named the National Museum, New Delhi, the Government Museum, Madras, the Prince of Wales Museum, Bombay and the Salarjung Museum, Hyderabad for this purpose.

Meanwhile, as will be seen a little later, and as has already been indicated earlier some of the universities had introduced Museology as a post-graduate subject of instruction with the support of the U.G.C. The Committee very cogently recommended that for practical purposes, the existing University Department of Museology should work in collaboration with the museums, for practical training, and that the courses should not be proliferated without taking into consideration the employment potential of such trained personnel. It also recommended the reduction of the course from 2 years to 1 year, with suitable modification (implied) in the case of those who had undergone in-service training in museology for 6 months or had rendered 5 years' service in museums.*

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* Philip Rawson, a UNESCO expert who had examined the situation of the museums in India and the status of training of museological hands in the country, had suggested the intensification of the already existing courses at Baroda and Calcutta, and had even stated (*vide* p. 20 of his report) that "the other possible ways of training curatorial staff outside University departments do not seem at all suitable for India where the whole conception of education is consummated in university degrees and diplomas." He was not possibly considering the large numbers of museum personnel who had already entered the profession without any formal training first because there was not any or suitable facility for such academic or technical training or instruction at the time of their recruitment, and, in fact, no recruitment would have been possible if the museums insisted on a prior certificate or diploma to that effect. The system continues to be the same today.

In spite of the firm recommendation of the Moti Chandra Committee, and even though some of the Museology Departments are in close physical relationship with University Museums such as at Varanasi and Calcutta, or are in close proximity to small departmental museums for teaching at Baroda, there does not appear to be any rapport between the 'museum' and the Departments of Museology. In all such cases it is the museums which should come forth with enthusiasm to extend all facilities to the students and staff of museology. If some of the large museums themselves can undertake training courses and utilize its own staff for this purpose without any additional remuneration or without allowing its own curatorial-museological work to suffer in any way, it is not understood why it should not be possible for the university museums to be more generous or helpful. The author as a member of the U.G.C. visiting team to look into the requirements of the Bharat Kala Bhavan, Banaras Hindu University, can vouch first-hand in general terms on the situation there, and that such co-operation was the basis of approving of teachers' scales for comparable museological posts in this case. There is apparently little coordination between the large Museum and Picture Gallery at Baroda and the Museology Department of the M.S. University of Baroda, maybe because the former has no obligation for co-operation and it may be even irksome or fraught with risks to security or chances of impeding the visitors. The situation in Pilani, Aligarh and Bhopal is apparently better.

C. Status of Training or Instruction in Museology in India

(1) *University and other courses*

It has been claimed that India has scored over the rest of the world in instituting regular university courses in museology as a separate discipline of study. The M.S. University of Baroda was the first such institution to introduce the course in 1952. Ian Finlay stated* that facilities for training of museum men have been available at the University museums of Harvard and Yale for something like half a century. But the earliest university course in museology in Britain came into existence as late as 1966. The priority of initiation may be a matter for pride of the institution concerned, but it is the criterion of the usefulness of the course and its potential for turning out competent museum personnel that is more important. An examination of the courses of study in museology at the different universities in India shows many diversities, in course contents, duration, and basic qualification for admission. These would naturally spell differences in the standards of achievement as well. The practice of some universities to prescribe only a graduate's degree in a relevant subject as a pre-requisite for admission it fraught with an inherent weakness. This makes a departure from the requirement " 'some knowledge' (obviously sound) of at least one, and preferably more than one of the subjects covered by the museum," as prescribed by Sir Henry Miers, and cited above earlier. It also loses sight of the Gwyer Committee's stipulation that the Director (of the National Museum) should be a scholar with special knowledge of one or more branches of knowledge of the Museum's work, especially because all curators are potential 'Directors' to be. Unless they have sound knowledge of any or more basic discipline at the entry point into the profession in their career they cannot come up to the top in the hierarchy. This can be a great source of frustration and inhibit the growth of their efficiency in the profession, besides possibly inducing a sense of inferiority complex. The practical problems of the university-trained museologists in regard to the securing of the initial employment in a commensurate position and promotion in later years in contrast to the preference extended to museum-trained in-service museum personnel lies in this basic difference in the quality of their basic educational degrees.

The views of Professor Rawson, who made an extensive study of the problems of museums in India, and, also examined the museology courses of the universities, particularly those of the Baroda and Calcutta Universities, are worthy of consideration in this context, even more than 22 years after they were first expressed. He emphasized that "the staff attached to these courses must contain specialists of academic distinction in every branch of learning involved in Museology as also distinguished members of the Museums service, including the curatorial staff that must be available near the Universlty."* This is a very significant statement and holds good to this day. That such

* Ian Finlay, *op. cit.*

** P. Rawson, *India Museology*, UNESCO/RP/India/CUA/7 Paris, May, 1964.

collaboration seldom takes place, and is frustrated by factors of professional rivalry, inertia, lack of enthusiasm or the force of inertia, lack of initiative and energy or dedication, inadequate course structure, and above all lack of any compulsion, etc., is well known.

Rawson's recommendation cited above suggests that the inescapably complementary role of 'museums' *per se* was not appreciated in his day in the imparting of museological instruction in the universities. The place of the museum in this context may have been better appreciated in the intervening period, but the situation in practical terms has not changed. There is, however, more cogency in his recommendation that the "Museum could appoint recruits on a probation basis and depute to the Universities for training." This would indeed be an ideal solution of the problem and the ego of the University as the role of dominant educator in any field may be satisfied. But a University Department of Museology working without close collaboration with a substantial museum for practical work cannot be imagined. It is comparable to the inseparable aspects of a Medical-Surgical course and a hospital. It is usually not realized by the pedagogic exponents of museology that without a sound practical training the theoretical instruction in a vocational course can be worse than useless, not to speak of its being unfair in the extreme to the hapless students of museology.

It will be desirable in this context to bear in mind that though Indian Universities have come into the field of archaeology, especially field work and subsequent analytical work in their laboratories, the Archaeological Survey of India still holds its predominant position and has the last word in the matter of certifying any one to be fit or unfit to undertake an archaeological excavation on any site, or even in permitting any one to explore or excavate any area or site both by tradition and constitutional prerogative as well as the legacy of the high quality of its practical and technical work. In the museum field it is the museums which had first set the pace (as far back as 1814 in the case of the Indian Museum) and standards of achievement, and the Museology Departments in the universities, *sans* museums, came much later, and they have a long way yet to go before they can win a dominant position as instructors, and possibly they may never win the race unless they radically modify their alignments and make a happy compromise with museums of standing if they do not have their own or university museums to work with.

The contribution of the workshops organized at the ten-day annual 'Museum Camps' held under the auspices of the Department of Culture (ever since 1963) to in-service middle and junior level museum personnel cannot be minimised or underestimated. The training imparted at these camps is of a practical nature, as the work consists of lectures and demonstrations by senior and eminent museum professionals, followed by practical workshops. The young museum employees find it delightful to undertake practical work under expert guidance in a spirit of comraderie and healthy competition. The participation is informed as the participants are not beginners. Being already in the profession they bring to bear upon it a measure of seriousness that cannot be provided by the academic students of museology even though they may be in possession of a sound basic post-graduate degree either obligatorily or otherwise. They also get to know the fellow workers from different institutions at these camps. Since they normally live and move together during the 'camp' they learn much from each other as well. They also get to know many senior museum personalities from all over India. This helps to develop their confidence and remove their inferiority complexes, if any.

Towards the improvement of museological knowledge and expertise among the juniors the contribution of the Museums Association of India too is highly commendable. The Association was founded in 1944 on the basis of the Oriental Conference of 1937 with a view to providing the museum personnel in the field with a forum for discussing their common problems, and for forwarding their recommendations to the State and Central Governments and to the Universities. It also takes up a specific topic of museology and discusses it threadbare at every annual session. The proceedings are brought out in the form of a monograph which are extremely useful to the student as well as to the professional museum personnel alike. The participation is thrown open to museum men from all over the country as well as to the students of Museology courses. The annual journal, when not a monograph, contains useful articles of museological interest.

Meanwhile it may be recorded that following the institution of a course in museology by the Baroda University others followed the example. Thus came the courses in the Calcutta University (1957), Banaras Hindu University Aligarh Muslim University the Centre of Advanced Studies in Indology and Museology, Birla Museum, Bhopal, affiliated to the University of Bhopal the Department of Museum Studies at the Birla Institute of Teconology and Science, Pilani, in succession. The wide diversities in the course contents, the minimum qualification required for admission and the duration of the courses have been referred to already. An examination of these diverse facets would show gross *inter se* disparities and anomalies. While the Baroda, Aligarh and Calcutta Universities admit B.A./B.Sc. graduates to the courses, the Department of Museum Studies, Birla Institute of Technology and Science at Pilani admits candidates with a Bachelor's degree in Engineering or with a Master's degree in a science subject. The Museology course housed in the Bharat Kala Bhavan at the Banaras Hindu University at Varanasi and the Centre for Advanced Studies in Indology and Museology at Bhopal admit candidates with a post-graduate degree in a relevant arts subjects. While the courses in Baroda, Calcutta, Pilani and Varanasi run for 2 years, those at Bhopal and Aligarh run for one year. The Calcutta and Baroda Universities confer a post-graduate, i.e., M.A. or M.Sc. degree in Museology. The B.H.U. confers an M.A. degree in Museology and the Birla Institute of Science and Techology offers an M.Sc. (Tech.) degree in Museum Studies. The Centre for Advanced Studies, Bhopal and the Aligarh Muslim University offer a diploma each -in Museology. The Baroda University grants concession towards the reduction of the duration of the course to one year in the case of persons already in museum service for five years. Some reduction in time is also conceded by the Pilani course to those from the profession, but the period of concession is not stipulated. The Calcutta University waives attendance at the classes to candidates who have been "engaged in active museum service for a continuous period of not less than three years in any recognised museum in India or outside". It is paradoxical that all these courses are run by University Departments or their equivalents with all their divergences. All these differences need to be reconciled and the course and conditions brought on a par for considerations of introducing a uniformly high level of training at all the centres with a view to raising the quality of museum work in the country.

In addition to these formal courses of training or instruction some of the museums have initiated short-term courses in museology. The National Museum had introduced a short-term (i.e., 2 months) course of training in the conservation of museum objects. In course of time the time-limit was raised to 9 months. But in 1977, with the setting up of the National Research Laboratory for the Conservation of Cultural Property, the course was divided into two categories, one for comparatively junior hands for a period of 6 months and assigned to the National Laboratory and the other a more intense one, for 3 months for advanced candidates at the Conservation Laboratory of the National Museum.

Since 1969, following the recommendation of the Moti Chandra Committee the National Museum has been running an in-service training course for a period of 6 weeks.

We have seen that India has had a long experience in imparting instructions in museological courses at university level. In 1964, the University Grants Commission requested the UNESCO to depute an expert to go into these courses then available in India at the two Universities of Baroda and Calcutta and to suggest improvements. The UNESCO deputed Professor Philip Rawson for a period of three months from September to November 1964 for this purpose. In his report (entitled *India*, subtitled *Museology*, UNESCO May, 1965 (R.P./India/C.U.A./7, Paris) Rawson opined *inter alia* "India, too, is leading the world in the university training of museology students. The post-graduate university courses first at Baroda and then at Calcutta have set a notable precedent which so far has been followed only in one University in the U.S.A." This statement would not merely boost the ego of the teachers of museological theories but also probably make them complacent. But the discrepancies and anomalies in the various programmes pointed out earlier, which proliferated with the introduction of museological courses at four more University Centres, have not escaped the attention of the teachers.

The Museums Association of India also took note of these discrepancies and devoted one of its four sessions to the discussion of the topic of 'Training of Museum Personnel' at its annual general conference at New Delhi in 1973. However, a full seminar on the same subject was held at the annual conference of the Association at Pune in January 1976. The discussion touched the topics of (1) minimum educational qualification for admission, (2) the course contents, (3) the duration of the course, (4) instruction in specialized courses on (a) display, (b) conservation, (c) taxidermy, (d) museum education, and (e) documentation. More than one participant felt that museum technology can be learnt in a museum but not in a university. Others felt that the University Departments of Museology should have a museum attached to it for instructional purpose. Among the ideas thrown up in the course of the discussion was one for the setting up of a Central Institute of Museology with a museum as a part of the university set-up for the purpose. The 'recommendations' of the conference included guidelines for the course content, with provision for the devising of short-term specialised courses as enumerated above, and suggestions in regard to the basic requirements of museology courses comprising (a) a building; (b) an attached museum with scope for organising workshops; (c) a laboratory with facilities for imparting training in conservation techniques; (d) a good library; (e) adequate staff on a par with those in other university departments; (f) arrangement and facilities for utilizing the services of other university departments and experts in general, both local and 'visiting' for 'teaching'; (g) a programme of visits by students of other museums for expansion of knowledge and experience; (h) provision for "internship" of the candidates for at least three months in one or more museums; (i) project assignments in other museums; and (j) facilities for research in museology.

As a post-graduate degree in a relevant subject was prescribed as the minimum educational qualification for recruitment to the lowest post of Curators in most museums in India those with a lesser basic qualification was obviously at a disadvantage. This phenomenon gave rise to unemployment and discontent among trained students of museology. The situation led to some rethinking on the problems of museology courses.

(2) THE U.G.C. WORKSHOP ON MUSEOLOGY COURSES

Introduction

Meanwhile by 1977, notwithstanding the haunting spectre of unemployment hanging before them, many other universities were planning to introduce and proliferate museology courses. When the late Dr. Grace Morley, former Director of the National Museum and then Chief Representative and Head of the ICOM Regional Agency of South Asia, drew the attention of the author to this matter, the Department of Culture was informed by him of the disturbing news, and requested to bring the matter to the notice of the University Grants Commission. It was felt that whatever was done in the matter should be done in coordination and the courses must first be devised well in keeping with the needs of the profession and reasonable prospects of proper employment of such personnel in the service of museums. Since the University Grants Commission usually sustains such programmes it was proper as well as practical for it alone to bring to bear its legitimate influence upon the concerned institutions so that they might act with restraint.

The U.G.C. promptly responded and organised a workshop on teaching and research in museology at the National Museum in New Delhi in April 1979 under the general chairmanship of the author with a view to examining the problems and the pros and cons of their possible solution comprehensively. The U.G.C. was particularly prompted by its realization of the changed role of museums as institutions for education, enlightenment, research and social change, as well as inculcating the inescapable phenomenon of a scientific outlook among the young, and by its apt appreciation of a great need for higher sophistication in methods of teaching and research and in the administration of museums. The Workshop made the following recommendations :

Preamble

During the last three decades the Museum Movement in India has gained in strength not merely in terms of number but also in variety. Consequently, the movement which had started with a bias on Archaeological Museums now stands diversified into Museums of Science, Arts and Crafts, Personalia, Industries, Anthropology and a lot of other different disciplines. The Museums have also come to be regarded as the institutions of education, research and social change apart from Centres promoting general enlightenment and information and visual and aesthetic delight. There is, therefore, greater need for the provision of a mechanism for the proper utilization of the museums for the purpose of education, enlightenment, research and social change as mentioned above. Correspondingly, there is a great need to introduce first a much higher degree of sophistication in the methods of teaching as well as administration of museums today, if the museums have to play their role properly of not merely of a store house of excavated or discovered objects but as a means of communication in the widest sense of the term and because one can foresee with a feeling of certainty that the role of museums would be expansively more significant in future than they were in the past, in view of the economic and industrial development of the country. In this context, the role of museums in inculcating a bias for a scientific outlook among the young cannot be over-emphasised.

Recommendations

The possibility of integrating the newly evolving pattern of education, namely, 10 + 2 + 5, for preparing students for museology as a professional course suggested by Shri P. Sabanayagam, then Education Secretary, who attended the concluding session on the 18th April may be examined. However, *under the existing situation the following recommendations are made* :

1. The basic degree for admission to the Museology course should be a post-graduate degree in a relevant academic discipline.
2. The teaching of Museology in any institution can be in the following two forms which may run concurrently :

    (i) A 2 years' course after M.A. or M.Sc. or an equivalent degree, such as B.Sc. in Engineering etc. leading to a post-graduate *Master's Degree in Museology.*

    (ii) One year Diploma course for persons who have the prescribed educational qualifications, namely, a post-graduate degree in the relevant academic subject and have served in a museum for not less than three years.

3. That the two-year training programme may be divided as follows :

   (a) The first year should be devoted to general museology, including a foundational course of inter-disciplinary nature which should also comprise science, technology, art and culture, etc.
   (b) The first half of the second year should be devoted to specialised training in the application of museum methods in relation to the individual specialisation. The second half of the second year should be devoted to internship in a suitable museum. Internship should lead to the submission of a report on the work done which would be assessed jointly by the Head of the host museum and the Head of the Department of Museology concerned.

4. That institutions where there is a proper infrastructure may devise short-term courses in ancillary subjects such as (a) taxidermy, (b) exhibit fabrication, (c) modelling, (d) conservation, (e) display techniques, and (f) techniques of preservation etc., for middle level personnel, depending upon the needs. The question of including these subjects in the vocational school courses should be examined.
5. It would be essential for the Museology Departments of the universities to have the facility of working in close inter-relationship with a university museum and it would also be necessary that the museum of a university gives full facilities to the Museology Departments for running the courses. For obvious reasons, therefore, it is essential that there is proper coordination between the University Museums and the Museology Departments.
6. For the purpose of making the teaching of Museology courses and the conduct of research therein broad-based, cooperation between various departments of the University as well as external organisations, such as the Archaeological Survey of India, Anthropological Survey of India, Zoological Survey of India, Botanical Survey of India, the national institutes like the National Research Laboratory, National Museums, National Archives, etc., may be obtained.
7. Adequate allocation of funds should be made by the University Grants Commission for facilitating the Departments of Museology to avail themselves of the services of experts in their area of specialisation for delivering lectures and also for fieldwork to be undertaken by the teachers and students, both for teaching as well as for research.
8. For facilitating research in the Departments of Museology, both individual as well as departmental, the U.G.C. should treat Museology as an academic discipline.

9. In order that the training in Museology can be intensified no Museology Department should admit more *than ten students* every year.
10. For admission to the courses, the considerations would be that the candidates have a good academic record with at least 50% marks at the Master's level.
11. That the U.G.C. should provide scholarships to all students seeking admission to the Museology courses with a view to attracting bright students to the discipline. Scholarships should, however, be awarded only to those who have secured at least 55% marks in their post-graduate or equivalent examination.
12. That the U.G.C. would constitute a sub-committee to look into the existing course contents, staff position, and facilities for teaching with the help of a university museum in all cases where the museology courses are financially supported by the U.G.C., or financial support of the U.G.C. is asked for.
13. The courses worked out by the Museum Association of India at its annual session of 1976 is recommended for adoption (See Appendix).

(3) THE EXISTING MUSEOLOGY COURSES IN INDIA

(a) *Department of Museology, Faculty of Fine Arts, M.S. University of Baroda, Baroda*

Admission : The minimum qualification for admission to the post-graduate Diploma Course in Museology is a Bachelor's Degree in Arts or Science. Subjects like ancient Indian history and culture/archaeology; history of art; history; anthropology; fine arts; botany; geology; zoology, chemistry etc., and aptitude for museum work. Persons already in museum service and who have completed five years of service are eligible to apply for exemption of one year.

Seats : 12 students every year.

Duration of Course : Two years, i.e., four terms. Nature of training and examination : Lectures and demonstrations are given on museum administration, collection, preservation, chemical conservation, display, educational activities, taxidermy, modelling and casting, diorama and group case-making, picture restoration, and photography etc. Besides, there is compulsory field-work and annual study tour to various Indian museums.

Each student has to submit a dissertation on an approved subject based on his/her research and practical work done in the department. A satisfactory dissertation and passing of written and practical examination and *viva voce* qualifies a candidate for the award of the post-graduate Diploma in Museology.

Museum : The Department has established close collaboration with the Museum and Picture Gallery, Baroda. The students receive all facilities to do their practical work in the Museum.

Address : Department of Museology, Faculty of Fine Arts, M.S. University of Baroda, Sayaji Park, Baroda.

(b) *Department of Museology, Bharat Kala Bhavan, Banaras Hindu University, Varanasi*

Admission : Master's degree in Arts, Science or any other subject. Preference is, however, given to candidates having Master's degree in Ancient Indian History and Archaeology or History of Art.

Duration : Two years, i.e., four semesters.

Nature of training and examination : The training is divided into two parts. Part I comprises four courses : (i) History and philosophy of museum; (ii) Range of museum activities; (iii) Documentation and presentation of objects; and (iv) Care of museum objects and museum photography. Part II also comprises four courses : (i) A Survey of Indian painting, Decorative arts including textiles in museums; (ii) A survey of Indian archaeological material including sculptures in the museums; (iii) Internship and preparation of projects in Bharat Kala Bhavan; and (iv) Dissertation on an approved subject.

Museum : Teaching as well as practical work takes place at the Bharat Kala Bhavan. The course lays special stress on the practical aspect of the training.

Address : Department of Museology, Bharat Kala Bhavan, Banaras Hindu University, Varanasi-5.

(c) *Department of Museum Studies, Birla Institute of Technology and Science, Pilani*

Course : M.Sc. (Tech.) Museum Studies.

Admission : A Bachelor's degree in engineering or a Master's degree in other disciplines with appropriate subjects.

Duration of Course : Normally two years, i.e., four academic semesters. Persons from the professional areas who have experience in the fields related to the professional courses may be given credit for such courses thereby reducing the programme duration.

Nature of Training :

First Semester
—History and Development of Museums
—Museum Planning and Organization
—Professional Skills and Techniques I
—Restricted Elective
Second Semester
—Museum Management and Operation
—Exhibits and Presentation
—Professional Skills and Technique II
—Restricted Elective
Third Semester
—Museum Education and Extension Services
—Professional Skills and Techniques III
—Professional Elective
—Free Elective

Fourth Semester
—Thesis/Seminar (or) Practice School.

Museum : Central Museum, Pilani, where the course is taught, provides facilities for practical training.

Scholarships : Two C.S.I.R. fellowships of Rs. 300.00 p.m.

Address : Department of Museum Studies, Birla Institute of Technology and Science, Pilani (Rajasthan).

(d) *Centre of Advanced Studies in Indology and Museology, Birla Museum (affiliated to the Bhopal University), Bhopal*

Admission : M.A. degree in Ancient Indian History and Culture and/or Archaeology.

Seats : 10 students, each will get a stipend of Rs. 150 per month.

Duration : One academic year.

Nature of training and examination : Attendance at lectures and practical field training in excavations, explorations and museum techniques will be compulsory.

There shall be four written papers.

1. Prehistoric, Proto-historic and Historical Archaeology;
2. History of Museums and Museum Organization;
3. Conservation and museum techniques; and
4. Indian architecture, art and iconography/or physical and social anthropology with special reference to Madhya Pradesh.

A *viva voce* test will also be taken.

Museum : The classes as well as the practical training are held at the Birla Museum, Bhopal.

Address : Centre of Advanced Studies in Indology and Museology, Birla Museum, Lakshmi Narayan Hill, Bhopal.

(e) *University Museum of Science and Culture, General Education Centre, Aligarh Muslim University, Aligarh*

Admission : B.Sc., B.A. or equivalent examination having offered any one of the following subjects :—Zoology, Botany, Chemistry, History (Indian), Archaeology, Anthropology or Fine Arts.

Seats : About 12 students.

Duration of course : One year.

Nature of training and examination : Under the scheme of vocational courses, the University imparts intensive practical training in Museology together with some theoretical knowledge in the subject.

The following two papers are compulsory :

Paper I—Museum history and administration;
Paper II—Display techniques.

Out of the following four papers a student will have to opt for any two, pertaining to his special interest or field of study :

Paper III—Taxionomy;
Paper IV—Art and Architecture;
Paper V—Chemical preservation;
Paper VI—Preservation of cultural objects.

Museum : The training will be imparted at the University Museum of Science and Culture, Aligarh Muslim University, Aligarh.

Address : University Museum of Science and Culture, General Education Centre, Aligarh Muslim University, Aligarh.

(f) *Department of Museology, Calcutta University, Calcutta*

The Department of Museology, University of Calcutta started its work since 1959 and since then more than 10 batches of students obtained their diplomas from this Department.

The University of Calcutta has accepted and introduced an M.A./M.Sc., i.e., Master's Degree course with effect from the examination, 1972. As such, the last batch of students which appeared at the Museology examination, has been considered as candidates for the Master's Degree course. At the same time, admission into the Diploma course in Museology has been stopped since then.

The revised regulations and Syllabus (given below) for the Diploma Course in Museology as published by the Calcutta University, 1972, will also continue as Regulations and Syllabus for the said Master's Course, excepting the thesis.

Admission

Any Bachelor of Arts (B.A.) or Bachelor of Science (B.Sc.) or graduate of any professional or other courses of Calcutta or any other recognised University may be admitted to the course provided that he has prosecuted for not less than two years a regular course of study in the subjects offered by him in the Diploma Course. Any graduate of this or any other University, engaged in active museum service for a continuous period of not less than three years in any recognised Museum in India or outside may be exempted from these regulations and permitted to appear for the examination as may be approved by the Syndicate on the recommendations of proper Museum authorities.

Duration of Course : Two years.

Nature of training and examination

Each candidate presenting himself or herself for examination shall be required to take up a special subject and submit a thesis on any Museum subject, done under the guidance of a teacher or such other person approved by the Syndicate.

Three general papers on (1) Museum Organisation and Administration; (2) Museum Education and History of Museums; and (3) Conservation and Preservation are compulsory. Similarly thesis is also compulsory. For optional papers the students have choice of choosing one of the following two groups :—

Group A
Archaeology and History
Arts and Crafts
Anthropology
Group B
Geology and Geography
Zoology and Botany

Museum : The Asutosh Museum of Indian Art is attached to the Department and provides all the facilities for practical work.

Address : The Department of Museology, Centenary Building, Calcutta University, Calcutta.

APPENDIX

Outline for Preparing Detailed Course Structures for Teaching Museology, Recommended by the Museum Association of India at its Annual Session (1976)

I. *Introduction to Museology*

- (a) History of the development of museums in the world; Development of museums in India;
- (b) Various types of museums;
- (c) Role and importance of museums in the modern world;
- (d) Co-operative ties between museums, museum organizations, national and international.

II. *Museum Administration and Management*

- (a) Administrative set-up of museums, legal status—Government, private, trustees, etc.
- (b) Museum staff—training, responsibilities, functions, recruitment.
- (c) Museum budget—financial resources and planning.
- (d) General maintenance, supervision and security.
- (e) Public relations and publicity.

III. *Organisation Aspects*

- (a) Collection and acquisition of objects—general principles of collection, ethics of acquisitions, modes of acquisition—purchases, loans, exchanges, field work.
- (b) Documentation—identification, classification, accessioning, cataloguing, indexing, data processing, information—retrieval, computerization.

(c) Museum architecture—museum building—how to plan location—lay-out, specific requirement of different types of museums, climatic factors, lighting, safety and security measures, movement, administrative and technical amenities, visitors' comfort, requirements, of the public adaptation of old building, acquaintance with architectural drawings.

(d) *Preservation and care of collections*

Deterioration of subjects—various factors, methods of examination and diagnosis, general care and simple treatments for preservation, climatic control, use of disinfectants, repellants, data on treatment of objects, liasion with outside laboratories, expert consultations and conservation measures, curatorial responsibilities in preservation and conservation, preservation of natural history specimens and storage.

(e) *Presentation, Exhibitions*

General theories of museum communication, general principles of preservation, planning and programming for display, display furniture installations, evaluation of museum display, various stages in planning and preparation of exhibits and exhibitions, various types of exhibitions—permanent, temporary, circulating.

Use of ancillary aids, audio-visual media, role of designer, curator, technical staff.

Labelling and graphics, drawings, modelling and casting techniques, communications, guidance of visitors, participation and evaluation.

(f) *Educational Activities*

Museum and the public—museum as a public facility, educational, scientific and cultural responsibility of museums, knowledge of the community and museum audience, principles of educational psychology, handling of audio-visual aids, guiding visitors, lectures, seminars, special events, activities for schools-curriculum enrichment, school loan services, clubs and hobby centres, teachers training.

Special programmes for young people and adults, special programme for the handicapped, liaison with universities and research institutions.

Museum extension programmes—mobile museum circulating or travelling exhibitions, regional centres (neighbourhood museums), radio and television programmes, creative workshops, clubs, seminars, conferences.

Visitor response studies, training for the education staff.

(g) Public facilities and services, parking, lunch rooms, cafetaria, museum shops, museum membership programme.

(h) *Museum Research and Publications*

The role of museums in research, examples of museum contributions to research.

Research by museums, principles of research methodology, facilities for students, research workers, scholars and scientists, field work, expeditions, field stations; Publications—scholarly/professional publications of the museums, catalogues, monographs, bulletins, handbooks, guide books, picture post-cards etc. Liaison with research institutes and universities.

(i) Museum Library—need, organisation, general library science principles.

(j) Museum Photography—theory and practicals.

IV. An essentially project-based course (theory and practicals) on Applied Museology as it relates to the individual background of the students such as Archaeology, Anthropology, Zoology, Botany etc.

Unfortunately, however, neither the recommendations of the Museums Association of India nor those of the U.G.C.-sponsored seminar, have yet been followed up for arriving at an agreed norm, not to speak of their being adopted by any institution so far. It is apparently improper and unfair to insist on a full two years' course for either a post-graduate degree or diploma after a basic post-graduate degree to qualify a person for entering into a profession at the lowest rank. For instance, an M.A. or M.Sc. is entitled, according to prescribed qualifications to, say, a lecturer's job in a university, but a mere M.A. or M.Sc. is not considered adequate qualification for a primary curatorial post in the museum profession in general. As all educational programmes are, in the ultimate analysis, oriented to the procurement of jobs, one year's diploma course after a post-graduate degree should be enough. The museology courses should, therefore, exclude the teaching of any aspect of the basic disciplines. Apart from the difficulty of convening a meeting of the university teachers as well as of the museum directors, who are concerned with recruitment and in-service training, the prospects of any upward change in the status of the university courses as a result of their rationalization and standardization are not very bright.

The existing in-service courses in museology run by the National Museum, New Delhi, National Council of Science Museums, Calcutta, Indian Museum, Calcutta, Salarjung Museum, Hyderabad, Government Museum, Madras, and the National Research Laboratory for Conservation of Cultural Property, Lucknow are helpful and serve their limited purpose of refresher courses. They are not meant to replace the full courses themselves. The conservation courses run by the National Research Laboratory for conservation of Cultural Property, the National Gallery of Modern Art and the National Museum, Respectively, are complementary.

4

Documentation

A. Introduction

One of the most important duties of any museum is in regard to the documentation of any object that is acquired by it. The documentation must be completed as quickly as possible after the objects have been acquired so that any lapse of time does not lead to oblivion, for, as a rule, things left to arrears have a tendency to accumulate, and there is nothing so discouraging or distressing as a heap of work lying ahead or looming large in the horizon.

Documentation is essential from several considerations. It is essential first for academic purposes with a view not merely to enabling the scholars to make use of the data for their researches, but also for finding out the basic aspects of the role of the object during its active life, the technologies involved in its production, the materials used, and the source or sources from which the ingredients were collected, its dimensions and weight, and its aesthetic qualities to promote enjoyment by its viewers and of course its chronological position. Documentation of the state of preservation is also essential for undertaking conservation work.

Secondly, documentation is essential to establish absolute identity, and enable quick recovery in the event of theft and even to prevent its unlawful export abroad, and in the event of its being lost, stolen or smuggled, to enable its recovery or return from a foreign country under the provisions of the UNESCO Convention on the Means of Prohibiting and Preventing Illicit Import, Export and Transfer of Ownership of Cultural Property, 1970, which entitles a signatory state (State Party) to recover a stolen antiquity by paying adequate compensation to the *innocent* purchaser of another signatory state abroad.

Accurate documentation would also enable museums in particular and owners of cultural property in general to distinguish the original from fakes, which are sometimes made by unscrupulous profiteers for profit, or even to substitute the fake for the original in museums without any consideration for the preservation of a nation's heritage. At any rate good documentation would serve as a deterrent against such malpractices, which are anti-national, anti-research and amoral.

Documentation, which should also cover conditions of preservation, would in the first place enable the museum conservators to undertake the proper measures for conservation, and prepare a proper record of the measures adopted. These in their turn would enable the owners to observe the effects of the treatment, and take timely steps for rectification of any detected defect, or accelerated deterioration, if any, that may be caused by the treatment, or even the circumstances of storage. Though all categories of museum objects would not lend themselves to absolutely identical aspects of documentation, by and large, the methodology is largely common to all the disciplines. Documentation should, therefore, cover the following aspects with close attention : (i) Accession no., (ii) object, (iii) material, (iv) accurate description, (v) dimensions, which should include protrusions, if any, (vi) weight, (vii) negative nos. of photograph in black and white as well as in colour (under a system in which the negatives are serially numbered, and the date of photography can be checked), (viii) measured drawing of plan, section and elevation, (ix) record of the state or condition of preservation, (x) approximate date of the object, (xi) source from which acquired, (xii) the date of acquisition, (xiii) the price paid for it, if acquired, or the value as may be assessed by experts on the date of acquisition, (xiv) location in the museum, and (xv) additional remarks or observations, if any including condition of preservation and treatment given, if any, at the time of entry into the museum.

These data are to be entered into a *General Accession Register*, which is to be treated as a master copy and kept under lock and key for safety. The ideal arrangement for a museum is to have a Documentation or Registration Unit, which should undertake the task of making the General Accession Registers and marking the objects with the Accession number as unobtrusively as possible and indelibly with a protective coat, say, of neutral nail polish. It is only after the objects have been photographed and the negative numbers entered in the G.A.R. that the objects may be made over to the concerned Keepers or Curators. The data should also be entered into a duplicate register, which alone should thereafter be handled by the Curators.* The Curators are expected to prepare Classified Accession Registers for each category of objects for study, quick reference and retrieval of the objects at need. The columns to be maintained in these two categories of registers are given in the Appendices A and B, respectively.

Over and above these, the Curators should quickly prepare Index Cards and fix and place them in card cabinets in a place accessible to the visitors for ready reference.

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* The Curator's register (a copy of the General Accession Register) which may also be consulted by research scholars from outside need not show the price paid for the object, as it is a secret of the museum. It would be desirable to prepare as many duplicate registers as there are sections, so that each section has an idea of the total collection and the concerned curators may also acquaint themselves with the materials in sections other than their own for the sake of general practice. But it is found difficult to prepare so many copies, as the curators' current work in the modern context is so heavy that the desired work cannot get done and the workload falls into arrears. Some idealists, however, advocate the preparation of up to 6 copies. With the introduction of the Xerox machine in comparatively recent times, it should be possible quickly to make as many copies as one may require for use in any museum.

A few samples of index cards for the different categories of objects in the National Museum are given below (pp. 64ff).

Normally the index cards should also have a clear and fairly large photograph of the object pasted on it, and they should be made accessible to scholars and consultants for their study. They may also order photographs on the basis of the negative numbers of the photographs pasted on them. Scholars would find it convenient to use the index cards alone for their general purposes, and can call for more details, if needed on the basis of the information on the index cards which must be made available to all. Researchers may look at the Index Cards and decide upon which originals to see for study and photographic documentation, if necessary. The first duty of the Curators of museums after the completion of the documentation in the General Accession Register is to prepare the Index Cards for ready reference and general use. It is also a primary service that a museum has to perform towards the society and the public as well as to students, connoisseurs and scholars of all categories.*

In this context it may be mentioned in passing that proper and full documentation makes it possible for the museum directors or curators to plan their exhibitions, which are again an essential means of dissemination of knowledge, promotion of research, and inculcation of aesthetic or, as the case may be, ecological appreciation, among the masses by the most direct and visual means at the command of the museums. The accuracy of the documentation covering complete measurements of protruding parts such as tenons in the case of sculptures or the weight enables the planners of exhibitions to plan properly for the exhibitions when they have to despatch an exhibition to another city or museum, or even abroad. All these data enable the planners of exhibitions not merely to design the packing cases accurately, but also to fill out the catalogue cards correctly, and undertake insurance properly and plan out the entire set-up, background, labels, and work out the brochures.

Modern science has devised neutron activation analysis as a means of finger-printing any object, and this can serve as a deterrent against faking. But these methods are expensive to adopt (and the data are also to be kept secret), which most museums in India cannot afford today. But infra-red and X-ray photography can be undertaken at lesser expense and maintained for record and consultation at need, also for the study of the technologies of production of man-made objects. But X-ray photography is not without risks of radio-activity and its deleterious effects, and can only be minimised or eliminated with proper precautions.

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* The point as to how many copies of Index Cards should be prepared is often debated. The minimum is one, but it would be certainly desirable to have more, say up to seven cards giving in each prominence to one aspect of the object as indicated below. While the main card should be white the others can be coloured, and each colour may by common convention connote a specific aspect. The various categories are enumerated below : (1) Accession number, (2) object, e.g., sculpture of Vishnu, Siva, Surya etc., (3) material (stone, terracotta, ivory etc. as the case may be), (4) school or style, (5) date, (6) painter, and (7) patrons in the case of painting. The other data should comprise photo negative number and description.

However, the normal process of documentation is illustrated below with a detailed discussion of the documentation of archaeological objects as representative specimens of man-made objects and artefacts, besides the practices followed in a few other disciplines in the major museums of the country.

B. Documentation of Archaeological Objects

1. *Introductory*

Documentation of any material remains produced by the human hand is of prime importance to the study of man's past and the assessment of the cultural pattern of any one group of people at any time of his history. An undocumented object is like an orphan and cannot be connected with any source of origin. Its date can at best be guessed on the basis of comparison with already documented specimens.

For an archaeologist an undocumented object is as good as an object lost, for he cannot make any reliable use of the material for his interpretation as to its actual use and relate it to its proper role in the life of man or to fix its chronological horizon correctly. In the reports of archaeological excavations one often comes across objects described as "unstratified". The use of such objects is limited merely to statistical count and typological comparison, but beyond these it is without any further utility. This situation arises from several factors, such as lack of proper observation during excavation, lack or loss of proper record, and, as often happens, a chance discovery on the surface. The acknowledgement of an object being 'unstratified" is an euphemism for lack of adequate observation. Such a situation emphasizes the importance of stratigraphical association as of primary importance in archaeological studies and records, for it helps to fix its date.

This leads us to consider the range of objects that can be classified as archaeological and the means by which they are initially acquired. Archaeology implies the study of man's past in all its ramifications of cultural and technological achievements through the mass of material remains. These are initially obtained by surface exploration and later by actual excavations, and museums acquire their stock of such remains by the usual processes of acquisition by (1) gift, (2) exchange, (3) loan, (4) purchase (through such objects are rarely offered for sale), or (5) active expedition. The materials broadly include stone and bone tools, pottery, terracotta figurines, seals, metal objects, objects of ivory, objects of glass, beads, terracotta netsinkers, dice, bricks, coins, bangles, rings, sculptures and the like.

Though initially found by exploration and excavation they find their way eventually to the museums maintained by the institutions or agencies that undertake the explorations. Most of the Museums in the States, the National Museum in New Delhi, the Indian Museum in Calcutta, the Salarjung Museum in Hyderabad, the Prince of Wales museum at Bombay and most of the 25 site or period museums maintained by the Archaeological Survey of India contain archaeological specimens. Among the museums setup and maintained by the Universities, mention may be made of the Departmental

Museums in the Deccan College at Pune, the Asutosh Museum of the Calcutta University at Calcutta, the Aligarh Muslim University Archaeological Museum at Aligarh, the Kausambi Museum at the University of Allahabad, and the Nagpur University Archaeological Museum at Nagpur, the Archaeological Museum at the M.S. University of Baroda and the Bharat Kala Bhawan at Varanasi. The Central Antiquities Section of the Archaeological Survey at New Delhi (now housed in Purana Qila) has perhaps the largest single collection of excavated finds. The Excavation Branch office of the Archaeological Survey of India too has a sizeable collection of excavated materials.

2. *Registration of excavated finds at excavation camps*

The excavated finds are documented with meticulous care by the excavators and site-supervisors during excavations. Directly as an object is found, the excavator on the spot pin-points the object by fixing its position in the particular stratum in which it is found by taking the measurements of the vertical and horizontal coordinates with reference to the 'pegs' fixed on the ground level, and also records its exact depth of occurrence below the surface. He puts the object into an envelope, the outer side of which contains the following columns to be filled by the excavator :

(i) Site,
(ii) Registered No. (Field No.),
(iii) Object (description by name, usually by its function),
(iv) Material (i.e., the material of which it is made) namely, stone, bone, terracotta, etc., as the case may be,
(v) Stratum (i.e., the layer in which it is found),
(vi) Locus (coordinates with reference to the fixed pegs),
(vii) Depth (i.e., depth from the surface at which found),
(viii) Description and sketch,
(ix) Date (of find), and
(x) Signature of the Supervisor.

The supervisor or excavator who is in charge of a particular site enters these details on the outer face of the envelope in which he stores the particular object. At the same time he enters all these details in the respective columns of his site note book, besides making a sketch drawing of plan and section of the object in the column earmarked for it. At the end of the day he makes over the objects with the proper entries on the envelopes to the supervisor in charge of antiquities. The latter in turn enters the details in his bound register, and gives a running serial number to the object, gets the number thus given to the object written in indelible ink on an unobtrusive part of the object, and stores them serially in sturdy envelopes, usually strengthened interiorly with cloth or gauze backing to prevent tearing by use and chance escape of the object through torn parts. The supervisor in charge of antiquities thus functions as the Registrar and Curator at once of the antiquities in the camp, and also on return to his headquarters.

The selected objects are thereafter photographed for the purpose of study and publication, and a proper record is kept of the objects thus photographed by means of a serial number on the print as also a record of the registered number of each object on the photograph.

It will be observed that though the Site Supervisor gives his own serial number to the object he discovers with reference to his particular trench, the assistant in charge of antiquities gives a running serial number, including the number of the trench (site) and prefixes it with an abbreviated name of the site, usually in three letters, such as RPR for Rupar or KLB for Kalibangan, as the case may be. He also records all other data submitted by the excavator in his register. The serial number in the register, regardless of the field number, becomes the final registration or accession number of the object and is also recorded at a later stage on the envelope itself in red ink.

The column for "Period" on the envelope is left blank by the site supervisor/excavator in the beginning as he is not in a position to decide upon the date (i.e., chronology) on the spot before a full assessment of the Period division has been made by detailed study. The assistant in charge of antiquities later on enters the "Period" as fixed in the respective column in red ink for record and study after the same has been decided upon by the excavator or director of the operations.

Surface finds are also recorded as "surface find" but for obvious reasons, without the stratum, locus and depth.

In addition to these it has also been the practice in the Archaeological Survey of India to prepare a site card, usually 10 cm × 10 cm. (4″ × 4″) in size, in respect of each object. It contains on one side the relevant details such as :

(i) Reg. No. (e.g., RPR/16),
(ii) Site (e.g., RPR-17),
(iii) Object (bangle),
(iv) Material (glass),
(v) Stratum (6),
(vi) Period,
(vii) Locus, and
(viii) Depth.

Below this is a squared space for the measured drawing of the plan and section of the object. The other (reverse) side is meant to carry a photograph of the object. This card with the drawing helps the typological, stratigraphical and material-wise classification of the object for the purposes of study/statistics and interpretation, and is extremely useful in the preparation of the excavation report.

Unfortunately, however, the card is not prepared as a matter of course. Its preparation depends upon the decision and convenience of the officer-in-charge and is often done in respect of select objects only. This is caused partially by the shortage of manpower and the pressure of the time factor upon the officer in charge who is not primarily a museum Curator or Director, for the completion of the report during his rather limited tenure.

The potsherds, however, which are the most prolific discovery from any site, present an obvious difficulty of documentation. In view of the sheer number it is not practicable to record all the exact details regarding depth and locus in respect of each sherd though such recording would be theoretically ideal. But the stratum and the peg numbers to denote locus are recorded on the field in the general labels that are tied to the baskets in which pottery is sent to the assistant in charge of pottery during the excavations in progress. He gets the potsherds washed, cleaned and dried and mended in possible and necessary cases and thereafter makes a selection by sorting out the apparently useless fragments after the preliminary study of the material and finally the statistical count is made of the wares and shapes as the case may be. He then gets the selected specimens marked in indelible ink with the abbreviated name of the site, the trench number, layer or stratum in which it was found and sometimes the locus also thus :

RPR-17(6). The figure RPR-17 stands for Trench no. 17 and the encircled figure of 6 indicates the layer no. 6 of the trench in which it was found at the excavations at Rupar. This means that the material was found in trench no. 17 of Rupar. This particular record usually does not contain any reference to the year of excavation. It would be desirable to have the year recorded also to avoid confusion thus : RPR-17 (1950), (6), for the student of the future would not have access to the subjective notions and ideas of the excavators nor generally access to his field notes for resolving a doubt. as these are the archival documents of the Survey. But such records after use should be preserved and thrown open to researchers for consultation and reference. Modern methods of xeroxing would enable the excavators to get copies made for more frequent use.

The assistant in charge of antiquities keeps also all relevant records of the movement of antiquities whenever they are sent out of the office or his custody for (1) photography, (2) chemical treatment or analysis, (3) study by any other assistant or the excavating officer, and is himself responsible for the safe custody of the objects.

Though other scholars are freely allowed to handle or see the materials in an institution or university under someone's supervision, they do not enjoy normally the rights of handling or using the materials, as in a museum, before the detailed report on the excavations has been published.

The strict method employed in a museum for the records and movement of antiquities cannot always be followed in an office which has to work on the excavated materials for a long period for study, interpretation and report. And after this has been done, the materials are put into the envelopes again, arranged object-wise and stored in boxes for future reference.

3. *Registration of Archaeological Objects in Museums*

(i) *General* :

As in all other cases and varieties of antiquities, a museum can have or acquire archaeological objects from comparable sources, namely, by (a) purchase, (b) gift, (c) loans, whether permanent or long or on short term, (d) exchange, and (e) expedition.* It may also receive objects for (a) temporary exhibitions, (b) study, (c) repairs and (d) scientific analysis etc. Though suitable records are indeed required to be maintained in respect of the latter category of objects, i.e., those that come to the museum temporarily, the objects of the former category, namely, those that are acquired more or less on a permanent basis, have to be documented comprehensively. For the sake of convenience, therefore, objects may be categorized as (a) permanent acquisitions, (b) long-term loans, and (c) short-term loans.

(ii) *Permanent Acquisitions* :

Regardless of the categorization of the objects on the basis of the nature of the museums' ownership rights, the basic requirements of documentation are common to all categories. While the loan objects in each variety of loan should be separately registered and documented, all the antiquities must have the following data in the following order :

(a) Year of acquisition,
(b) Serial number (year-wise),
(c) Site or findspot,
(d) Name of object (e.g., sculpture, bangle etc.),
(e) Material (stone, glass etc.),
(f) Dimensions (length, breadth, thickness, diameter and weight in the case of coins),
(g) Date (of the object),
(h) Cultural horizon,
(i) Source of Acquisition with address
    (1) Date of Acquisition
    (2) Reference to correspondence on the subject,
(j) Means of Acquisition with details, i.e., by
    (1) gift from . . . .
    (2) exchange with . . . .
    (3) purchase from . . . .
    (4) expedition in . . . .
    (including the year of expedition),

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*Museums in India do not normally engage in field operations as the museum personnel generally lack the required technical training and experience, and also particularly because the two functions are not compatible.

(k) Price paid
(l) State of preservation
(m) Stratum } With pointed reference to the excavation or expedition undertaken
(n) Locus }
(o) Depth below surface }
(p) Description
(q) Location
    (1) Gallery no., Section
    (2) Reserve Collection, Room no.,
(r) Remarks,
(s) Photo negative no.,
(t) Signature of the officer-in-charge, and
(u) Published reference, if any.

Whether these data should be recorded in bound registers, loose leaf registers or plain cards has been a subject of controversy. The basic premise is that the data must be recorded in respect of every object, regardless of the manner in which it is done. Furthermore, the data must all be available at one place and should be readily accessible to the museum authorities. From the point of these twin considerations, the bound register would seem to have no single rival in comprehensiveness, regardless of the usual objection against it of disuniformity of the handwriting which must invariably be depended upon for making these records. Moreover, it would be desirable to have two copies made of this vital register. One of these should be deposited with the Director and kept under lock and key. It must be handled with as much care and caution as a cash-book, which, under rules, is required to be brought up-to-date every day and locked up in the cash chest. Considering the fact that museum antiquities are not being acquired nor are the entries made every day beyond the initial stage of the organization of any museum, the periodicity of the handling of the master copy would not be frequent, and, therefore, there is not so much chance of its getting damaged or soiled by constant use and wear and tear.

The duplicate copy will be the one in use for reference purposes and should be with the Curator or Registrar as the case may be. The ideal would, of course, be three copies, if resources of men and money permit it.* Maintenance of three copies of the Register does not, however, seem to be practical especially in the conditions prevailing in most, particularly the smaller, museums in India. If it were possible to have three copies made, and if the museum had a Registrar as well as a Curator or a Keeper, each of these officers could use one copy exclusively for himself. These documents, not being of immediate concern to the public, should not be made available to them, but treated as confidential documents for official use and reference only.

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*Making xerox copies, which has come into vogue in comparatively recent years, is a great help in this direction.

The only real objection that can be raised in the case of the bound register is the difficulty of coping in record keeping with changes in the *location* of the objects. Though such changes of location are not frequent, changes do take place and sometimes these may be much more than the register may have space for. The answer to the problem would seem to lie in leaving a little more space or introducing an additional column for the location to accommodate repeated changes of location. Even this stratagem may not be adequate. In such cases of need a cross-reference may be made to a location card that is also necessary to be prepared simultaneously as will be explained later, or the entries for location may be made in pencil, and rubbed off after every change.

(iii) *Long-term Loans* :

The record in the Registration Book for objects on long-term loan should have the same details as the permanent acquisitions. These must, however, be distinguished by the year of acquisition being written after the serial accession number, as in the following manner : 1.73, using only the last two digits of the year 1973, as in this case. If the long-term loans have to be eventually returned to the lender, a suitable remark in a distinctive colour, say in red ink, may be entered in the remarks column of the Register to indicate that the object has been returned to the lender on a particular date, with a reference to the correspondence, on the subject. The accession number may also be scored out in a process called de-accessioning.

If the long-term loans are eventually gifted to the museum, they are to be brought into the Register of Permanent Acquisitions, with a fresh accession number, after deletion of the relevant entries in the Long-term Loans Register.

(iv) *Short-term Loans* :

Though many writers have deprecated the preparation of elaborate records for objects on short-term loan, it is felt that the effort required for recording even the brief records is almost as much as for recording permanent acquisitions. It should, therefore, be possible as well as desirable to adopt the same form of the bound register and compile all the available data in the self-same columns as in the case of Permanent Acquisitions and Long-term Loans, though the Register itself should be separately maintained and superscribed with the words "Short-term Loans". The accession number, however, may be made in the same manner as in the case of Long-term Loans, with the distinguishing mark of the letters S.L. (short for Short-term Loan) preceding the number as in the following example : SL 11.

When the loan is returned to the lender, a suitable entry in the Remarks column of the Register in red ink, should be made to indicate the fact of the object having been returned to the lender, with date and cross-reference to the correspondence on the subject. Simultaneously the accession number may also be scored off.

It has been suggested that when a loan is returned the relevant entry in the register should be scored off. It should, however, be desirable not to score off all the entries other than the accession number in respect of such objects, for, the retention of the entries would enable researchers and scholars to have a little more evidence at their disposal, and, if they need, they may establish contact with the lenders for permission and/or facilities to examine the objects at first hand.*

The cards may be prepared in a set of four or five cards in respect of each object, one each by

(a) accession number,
(b) object (e.g., bangle, sculpture, sword etc.),
(c) material (e.g., glass, stone, iron etc.),
(d) location (e.g., Gallery no. 1, Reserve Godown no. 2 etc.), and
(e) findspot.

These cards should be arranged in each category in the order of accession number with a suitable combination of the alphabetical order. These cards would enable the museum authorities as well as the scholars to obtain all the data needed for research or preparation of a catalogue, as the case may be. Scholars, students or the public may be allowed free access to these cards. It is germane in this context to decide if it would be desirable to punch the cards and run a stick through them to guard against loss or misplacement or to have them without the median stick and punched hole. Both have their good points. But in view of the difficulty posed by the need of frequently recording change of location, cards without the piercing rod are certainly more handy.

The index cards should have the following data in each category :

A. Accession Card

Accession no.
Object
Date
Dimensions :
  Thickness or Height
  Weight
  Diameter
  Length
  Breadth
    Published Reference

Location
Material
Findspot
Site
District
State
Photo Negative no.

---

*In most western libraries there are catalogue cards even for books or journals that are not available in the library. They bear reference to the other libraries in the town where these may be available. Such details can only be gathered and recorded when the institutious are suitably and adequately endowed with both manpower and finances.

B. Object Card

Object
Accession no.
Date
Dimensions
Published reference

Material
Location
Findspot
Photo negative no.

C. Material Card

Material
Accession no.
Date
Dimensions
Published reference

Object
Location
Findspot
Photo negative no.

D. Location Card

Location
Object
Date
Dimensions
Published reference

Accession no.
Material
Findspot
Photo negative no.

E. Findspot Card

Findspot
Site
District
State
Object
Date
Dimensions
Published reference

Accession no.
Material
Location
Photo negative no.

For coins, which are to be treated as archaeological objects, the details in the accession register may include, under the item description, i.e., item 16 of the general form of accession register, (a) the dynasty, and (b) king.

At the same time the form used by the National Museum by adapting the time honoured from DGA 86, in vogue in the museums of the Archaeological Survey of India, may be safely utilized by all museums in respect of coins, for there is hardly anything to beat it in its utility and comprehensiveness of details, and compactness of size. The photograph pasted on it must show both the obverse and reverse.

As objects are frequently moved about from its location for various purposes such as photography, chemical treatment, temporary exhibition, loan or gift to another institution or organization, a suitable record should be made in the bound registers as well as in all the cards. As this particular entry has to be made rather too often it is to be considered whether the entries should be made in ink or in pencil.

It is practical, however, to make the record in pencil in all the relevant places, and make such an entry afresh every time the location is changed, after erasing off the previous entry. But this is a matter of high responsibility and must be carried out as promptly after the location change as possible. The personal factor involved poses a risk of unintentional omission such as may be caused by sudden illness of the curator concerned which cannot be ignored. It would also be desirable further to leave a card or label at the old or vacant place of storage, particularly in the display gallery or show-case concerned, if empty, containing the following details :

Accession no. Object
Temporarily withdrawn for
photography/exhibition etc.
Date
Signature of the officer concerned

C. Methods of Accessioning in some Museums in India

(i) *The National Museum*

(a) *General*

The National Museum maintains an Accession Register in which the following details are recorded :

(1) Date Acquired
(2) No.
(3) Previous/or Excavation no.
(4) Source
(5) Short description
(6) Date or period
(7) Locality
(8) Remarks and References
(9) Location
    (a) Room
    (b) Case
    (c) Shelf

The National Museum also maintains a standard index card measuring (12.7cm×7.6cm) 5″×3″,* for all objects other than coins, and it contains the following details :

No. 63.650

Seated image of
Bodhisattva
Padmapani
Bronze
Ht. 3.6 cms.
Purchased from
Shri Dhiraj Bahadur Singh,
Calcutta.

Neg. No.

At the top right hand corner a small photograph** used to be pasted for ready reference. The space on the reverse is kept blank but free to accommodate other details, if necessary. It seems to fall short of the details recommended earlier for index cards by the absence of the record of 'location'. Additonal cards may also be used to record greater details.

The National Museum has also been using a larger form measuring (15.24 cm×10.16 cm) 6″×4″ for coins. This form contains the following details on the obverse face.

Accession No.	Dynasty	Metal
Cabinet No.	King	Weight
Drawer No.	Date	Size
Locality		
Mode of Acquisition		Photograph
Condition of Preservation		

The bottom right hand corner has a space for a photograph. It is an adaptation of the form DGA 86 in vogue in the Archaeological Museums under the Archaeological Survey of India. The reverse side has space for the following details :

Description	Obverse
National Museum, New Delhi	Reverse

---

*The size of the card has since been enlarged.

**The small size of the photograph may not serve the purpose as it lacks details. The deficiency has since been removed by introducing a full size photograph to be pasted on the reverse. This is particularly useful in respect of the details in the miniatures.

The National Museum has also adopted a detailed and informative proforma for the Central Asian Antiquities from the Stein collection in its possession as given below :

B. Department of Central Asian Antiquities, National Museum, New Delhi

Proforma for Detailed Basic Data

Object (in general)

Ant. No.	Neg. No.
Provenance	Attribution
Size	Condition
Slide Nos.	Location

References

(1) Andrews' Catalogue page
(2) Stein's Publications :

Title	Vol.	Page	Plate

(3) Other Publications :
  A.
  B.
  C.
  D.

Iconographic Details Ant. no.

(1) Major Deity
  (a) Mudra
  (b) Vahana
  (c) Emblems
  (d) Other characteristics
(2) Minor Deity
(3) Attending Figures

Donors

Cultural items Ant. no.

(1) Costumes of Major Deity
  (a) Head-dress
  (b) Upper garments
  (c) Lower garments of attending figures
(2) Ornaments
(3) Hair-do
(4) Pots and pans

(5) Musical instruments Ant. No.
(6) Weapons
(7) Furniture
(8) Architecture

Fauna
Flora
Colour Scheme
Other Items Ant. No.
Inscription
Text
Remarks

(ii) *Museums under the Archaeological Survey of India*

The Archaeological Survey of India maintains 16 museums. Though many of the objects in these museums have been obtained by excavation, they can be classified broadly into three groups, namely, (a) those associated with important monuments, (b) those associated with excavation sites, and (c) those associated with ancient capitals or centres of administration, etc.

The museums at (1) Bodhgaya, (2) Khajuraho, (3) Konarak, (4) Halebid, and (5) Hampi belong to category (a). These contain objects derived from the monuments in the form mainly of sculptures and architectural fragments. The museums at (6) Sarnath, (7) Nalanda, (8) Sanchi, (9) Nagarjunakonda, (10) Amaravati (11) Kondapur, (12) Lothal, (13) Ratnagiri, (14) Kalibanagan, (15) Vikramasila, and (16) Vaisali belong to category (b) and contain objects derived mainly from the excavations on the associated sites. [The proposed museums at (i) Vaisali, (ii) Lothal, (iii) Kalibangan, (iv) Vikramasila, and (v) Ratnagiri would also be of this category]. The museums at (17) Red Fort, Delhi, (18) Fort St. George, Madras, (19) Daria Daulatbagh, Srirangapatna, (20) Goa, and (21) Bijapur belong to category (c) and contain objects of a wide variety encompassing (i) paintings, (ii) textiles, (iii) bricks, (iv) tiles, (v) metal objects, (vi) manuscripts including *farmans* and *sanads*, (vii) prints, (viii) arms and armour, (ix) porcelain, and (x) glass etc.

In these museums the objects have been accessioned serially without any effort at breaking them up year-wise, for after the museums had once been organized, there is normally no further scope for expansion or further acquisition in the offing.

The Accession Registers of the Survey's museums contain the following details in vertical columns :

(1) Date
(2) Accession No.
(3) Source or Field Register No.
(4) Mode of Acquisition
G., P., E. or L.

(G stands for gift
P stands for purchase
E stands for exchange
L stands for loan)

(5) Description
(6) Period
(7) Locality (i.e., findspot)
(8) Price or value
(9) Location in the Museum Display/Reserve
(10) Remarks and Reference

These museums also prepare two index cards in prescribed forms, called DGA 86 and 87, respectively. The forms measure 15.24 × 10.16 cm (6" × 4") each and are more convenient than the smaller forms in use at the National Museum. The Form DGA 86 is for coins and has the following details :

Dynasty	Metal	Reg. No.
King	Weight	Cabinet No.
Date	Size	Drawer No.
	Locality	
Mode and date of acquisition with reference		
Short Description		

The Form DGA 87 is used for all other objects and has the following details :

Class		
Material	Locality	Reg. No.
Date	Size	Gallery
Mode and date of acquisition		Case No.
with reference		Drawer No.
Short Description		

A small photograph is also pasted on the rear side of these cards. The negative number of this photograph is also recorded for ready reference in all cases, where an object has been photographed.

The classification of objects in the site museums under the Archaeological Survey of India is as follows :

(1) Sculpture,
(2) Pottery,
(3) Stone Implements,
(4) Coins, Medals and Tokens,

(5) Inscriptions (stone, metal and other objects),
(6) Paintings, including miniatures,
(7) Textiles,
(8) Bricks and Tiles,
(9) Wood-carvings,
(10) Metal objects other than sculptures and inscriptions,
(11) Minor antiquities such as beads, amulets, conch, ivory, leather and bone objects,
(12) Terracottas,
(13) Precious antiquities (ornaments, gold, and silver objects, semi-precious stones, relic caskets),
(14) Manuscripts, including *Farmans* and *Sanads*,
(15) Arms and Armour,
(16) Porcelain and Glass,
(17) Prints and Photographs, and
(18) Seals and Sealings.

(iii) *The State Museum, Lucknow*

The State Museum in Lucknow, U.P. maintains the following details in the Accession Register in vertical columns :

(1) Date of Acquisition,
(2) Accession No.,
(3) Reference No. of Printed Catalogue,
(4) Description of Article,
(5) Measurement size/weight,
(6) Period or Date,
(7) Provenance with basis for information,
(8) Condition,
(9) Mode of acquisition,
(10) Price paid,
(11) Voucher No. and date of payment or other reference,
(12) From whom acquired (name and address),
(13) Price Assessed (year/amount)
(14) Signature of assessing authority,
(15) Signature of Director, and
(16) Remarks

The Museum also prepares a single index card with the following details in respect of all objects other than coins.

A.N.	D	S	Loc. New

L	B	H/T	P	Pd.

Reverse of the Card

Key to Abbreviations :

A.N.=Accession No.
D=Date of Purchase
S=Section
Loc.=Location in Museum
L=Length
B=Breadth
H/S=Height or Thickness
P=Provenance
Pd.=Period.

Explanatory Note : A.N. consists of two digits of year of acquisition followed by a serial number of entry in accession number, followed by code number of section. Location is denoted by Gallery No. followed by Case No.

The classification number mentioned under the column of Section No. is according to the system devised by this Museum. It is also followed in the Archaeological Museum at Mathura.

1. …………………
2. …………………
3. Coins
4. Sculpture
5. Metal
6. Terracotta
7. Stone Inscription
8. …………………
9. Pottery
10. Seals
11. Beads
12. Manuscripts
13. …………………
14. …………………
15. …………………
16. …………………
17. Painting
18. …………………
19. …………………
20. …………………
21. …………………
22. Wood work
23. …………………
24. …………………
25. …………………
26. Miscellaneous

D. Conclusion

Examples of the systems of accession and indexing can be multiplied. It would be desirable to adopt a common and as comprehensive a system as possible in all the museums. But the idea does not seem to be practicable yet in India, in view of the limitations of resources in men and money, and the enormity of the task involved in the cases of the already established and, particularly, large museums.

It is hoped, however, that the agreed standards that may be adopted by deliberations directed on the subject may be adopted in respect of future accessioning and indexing as far as it may be practicable.

In the matter of classification of the objects, the code that may be adopted may be commonly applied. This matter, however, needs discussion and deliberation before a decision is arrived at. It would perhaps be easier to adopt the code number corresponding to the number of the letter in the alphabetical order. In the classification the function of the object should be the guiding factor, and its material or medium should have a secondary, though no less important place within each category. Again another sub-classification may be made, in the alphabetical order, according to the material or medium of all the objects for easy recognition. How best the two can be combined and commonly adopted would merit some discussion.

The Index Cards should have only the essential details for identifying the object and locating it. But the details as to the source of acquisition, price paid etc., not being of academic interest should be omitted from the cards. The omission of such unnecessary details would help the maintenance of the record in small cards and their preparation in much less time, and the extra space thus released would be available for noting greater details in the permissible columns.

It may not be possible, however, for all museums to prepare all the five sets of cards suggested earlier, because their maintenance would depend primarily on resources in men, material and space. It would be absolutely essential, however, to maintain an 'Accession Card' for ready reference.

The problem of coping with the change of location can be solved by adopting the system of using additional cards of the same size, with the following details :

Location	Date	Signature of authority

The main card may be pasted with a sturdy adhesive tape to the edge of the covering flap of a sturdy envelope so that the face containing the data fold upon the envelope. The reverse may contain the columns for change of location suggested above. If any additional information is desired to be recorded the envelope may be used for containing these cards for such record. This system is in vogue in some of the museums in the Netherlands.

A big lacuna in our museums in general is the general absence of a catalogue. A catalogue is a compendium of documentation of use to students, scholars and general readers alike. A catalogue can never be made complete, comprehensive or up-to-date in a museum the collections of which keep on growing. The fear of an incomplete catalogue need not, however, hold up the preparation of the catalogues in manuscript.

Even the National Museum is not free from this lacuna. The necessity of catalogues cannot be overemphasized, for the very undertaking of the task would not merely be of yeoman's service to the scholars, laymen and taxpayers, it would also foster research and enhance knowledge. In these days of widely rampant theft of antiques, the existence of catalogues with detailed descriptions of the objects, and photographic illustrations would help trace the stolen antiques within the country or outside and enable the country to claim* them back from foreign countries if smuggled out, under the provisions of the UNESCO Convention on the Means of Prohibiting and Preventing the Illicit Import, Export and Transfer of Ownership of Cultural Property. Even a catalogue in manuscript which has not yet been sent to press, would be useful in this context.

Leastways, it should be possible to photograph each object, and prepare and publish a complete list of objects in the possession of a museum with the following details, even if the photographs are not printed.

(1) Accession No.
(2) Object
(3) Material
(4) Photo negative No.

Such a list too would be helpful, for reasons already elaborated above, to all concerned. The implementation of this suggestion would, however, presuppose the prior adoption of the strictest security arrangements without any loopholes, for obvious reasons.

In this context it may not be out of place to mention that under the new Antiquities and Art Treasures Act, 1972, which is to be implemented shortly, all antiquities in the possession of private individuals or institutions other than museums, offices, cultural and educational institutions owned, controlled or managed by Government will have to be registered with the Registering Authority to be appointed at the district level. While the procedure will help to quicken the documentation and registration of antiquities, of specified categories, in private possession, it presupposes that the government institutions will have completed their duty in this direction in respect of all antiquities, regardless of the categories, specified in their possession.**

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*Under the provisions of the Convention a smuggled or illegally exported object of cultural property can be reclaimed with the help of documented evidence only. The importance of the urgent completion of the comprehensive documentation of all museum objects cannot, therefore, be overemphasized.

**Unfortunately, however, documentation in the government institutions are far from complete, in spite of their advantageous position as compared to private individual owners of antiquities or institutions. It is the government institutions which have first to set an example.

The proforma to be used for this purpose is given below :

The Antiquities and Art Treasures Rules, 1973

Form IV

Register of Antiquities
[See Rule 8(a)]

Antiquities such as stone sculpture/terracottas/metal objects/objects of bone and ivory/ jewellery/woodwork/seals/medals/coins/paintings/manuscripts textiles.

Sl. No.	Identification of objects and description	Material	Size	Approximate Age	Date of acquisition
1	2	3	4	5	6

Sources of acquisition including the name of the person/firm from whom acquired with address	Mode of acquisition	Price paid for acquisition	Registration No.
7	8	9	10

Date of registration registered	Date of sale if any	Name and address of person or firm to whom sold	Place where object is kept
11	12	13	14

Reference to photo album No.	Photo No. and page	Photographs in 6 × 6 cm. size
15	16	17

(to be pasted in the register)

It is hoped that the urgency of the task of completion of documentation of antiquities including archaeological specimens is realized and acted upon by all institutions concerned including all museums private or public, which owe a special responsibility in this regard to the public and to the nation as a whole.

E. Recapitulation

(i) *Index cards*

The importance and urgency of documentation cannot be overemphasized. They are often not realized by the usually careerist museum men of today who would like to spend as much time as possible, even of the hours that must be devoted to the museum's curatorial duties, to enhance their own scholarship through the quick publication of books or even articles or to attend seminars, or to befriend scholars of status, especially if they happen to be influential and can help them, even by going out of the way by providing them with information, photographs and in all other manner of ways. This leads naturally to increasingly less and less time for their own curatorial duties. All these acts are not reprehensible by themselves, but may be permissible provided the basic curatorial duties have been completed, particularly the documentation work, including photography.

One of the most important aspects of documentation is the preparation of '*Index Cards*' and the pasting of photographs on them, and making the index cards accessible to the public, including the scholars. These index cards would help the publication of handlists and catalogues.

Since the museum is also a research institution, it is naturally frequented by scholars in search of materials for research. If there are index cards, the scholars can collect their basic data from them and decide which articles to see and obtain photographs of for the furtherance of their researches. It follows as a corollary that there should be an album of photographs too in a photo archive in which to examine the objects in greater detail to begin with. The photographs must invariably be of high quality so that scholars may use them basically for their researches, and if it becomes necessary to see the objects they can compile the lists and make an application for permission and facilities to see them to the Director or to the Curator, only to enable the latter to take out the objects, ensure their security and place them at the disposal of the scholars at appointed time and on the appointed day. More often than not the Curator or his assistant has to be present to ensure the safety and security of the objects under study during all the hours of study by the scholar from outside. It can be easily recognized that this arrangement cannot be done every day or for every scholar that comes to visit a museum. It may be emphasized that such facilities are also not ordinarily or normally made available on demand by the foreign museums without a prior appointment, depending upon primarily the convenience of the institution concerned. It is felt that the museums must first be given full facilities to complete their documentation, photography included, and thereafter two days, preferably consecutive, in the week should be earmarked for the purpose of welcoming the visitors to study the objects in original, leaving the rest of the days to the curators to attend to their curatorial duties, which comprise cataloguing, examination of the objects, verifications, answering queries from the public, undertaking publications etc., and of course doing their own researches, besides looking after their galleries and ensuring the safety and security of the objects under their charge, helping in the rotation of objects on display, changing the exhibits or helping in organizing temporary exhibitions, bringing the labels up-to-date, and discharging a hundred other odd jobs in professional interest, which do not exclude looking after foreign scholars who come under cultural exchange programmes or fitting out an exhibition for outside, which call for considerable thought and advance planning besides execution, not to speak of the limited factor of time that can often be very frustrating.

(ii) *Documentation and Security*

The importance of documentation becomes most apparent in the event of a theft. The record of complete documentation alone enables a quick investigation into the crime and provides a reasonable chance of recovering them. Besides, under the provision of the UNESCO Convention on the Means of Prohibiting and Preventing Illicit Import, Export and Transfer of Ownership of Cultural Property (1970), a smuggled object can be reclaimed only on the basis of well documented evidence, and an art object is seldom stolen except for smuggling for profit. The Interpol publishes a documentation of stolen objects called 'Ten Most Wanted Objects of Art' with details of Documentation and Photographs. It is full documentation alone that enables the Interpol to publish the details of documentation and this helps not merely to prevent museums or art dealers from acquiring them but also eventually to trace them. Even if a stolen object is damaged, may be sometimes beyond recognition, a complete documentation helps research and proliferation of knowledge and thus serves the basic purpose of documentation.

(iii) *Urgency*

The work of documentation should be completed as quickly as possible after the acquisition so that not merely is the memory about certain basic factors such as provenance and use, and circumstances and history of its find fresh, but also there is no accumulation of work, which by itself may later loom large in the horizon as a mountain and serve as a stumbling block and a deterrent factor.

(iv) *Dimensions*

In making the entries in the accession registers, particular attention must also be paid to the dimensions of the objects and the condition of preservation. In recording the dimensions of sculptures the protuberances and tenons are often lost sight of and they create complications at a later stage. In recording the dimensions of a miniature painting, the dimensions of the mount and frame are often taken into account, while the actual painted surface is forgotten. In the case of small objects like coins or paintings efforts should also be made to photograph them immediately, to prevent any switching at a later stage.

(v) *Documentation and Conservation*

The condition of preservation is another area of documentation which does not receive adequate attention in our country. If any object is afflicted with a disease and if it is not detected at the initial stage and remedial measures are not adopted at once, not only will the disease spread, but it would affect others with which it would be stored. This record is also necessary to observe changes of conditions, if any, in storage with a view to taking remedial measures in time.

(vi) *Valuation*

The documentation sheet contains a column for valuation. In the cases of objects obtained as gifts the valuation is sometimes not available. In such circumstances the objects must be evaluated by a Committee of Experts and the same recorded in the Accession Register as quickly as possible after the acquisition.

(vii) *Registration Unit*

In the smaller museums there is only a Curator, as the only technical hand entrusted with the museum, and he is often not given any clerical assistance to help him with documentation, not to speak of photography. Even in a big museum like the National Museum, there is no earmarked staff for documentation, and the work is got done by makeshift arrangements, which often affect the regular working of the Departments. It would be ideal for any large museum to have a Registering Unit which should consist of a Registrar of the rank of a Curator or Keeper, a Curatorial Associate, a typist and a few attendants to handle and help move the objects for the purpose. He should also have a large but well protected room for storage, working and photography so that all newly acquired objects may be properly documented by him in a proper atmosphere and distributed to the respective departments with complete records, after the objects are examined by the Conservation Laboratory and treated and rendered safe. The Accession Register should also bear a reference to the chemical treatment, if any, received by any object for future reference and observations, and also for deciding upon further courses of conservation if needed.

(viii) *Documentation of Conservation Work*

The Chemical Laboratory must in its turn keep a complete documentation of the treatment given to any object both for reasons of scientific record as well as for later observations of stabilization or deterioration if any. A few specimens of the proforma of the record are given in the *Appendix*.

(ix) *General and Classified Accession Registers*

It is only after the General Accession Registers are completed that the classified

Accession Registers according to the classification or categorization of the objects should be completed. The preparation of the Classified Accession Register is a work of the specialists and involves much study and research. The preparation of such registers also helps promote research and proliferation of knowledge and education of the masses and thus helps to serve the basic purpose of museums.

In the study of coins special attention is paid to the weight of the coins no doubt with a view to finding out the relative value in ancient times, but weight should form a specific item of documentation, especially in the case of heavy objects like sculptures or bronzes.

The ideal columns for (a) General Accession Registers, (b) Classified Accession Registers, (c) Index Cards, and (d) Catalogue Cards are given below. The manoeuvrable sizes of the registers are also given below though museums would be free to choose their own sizes, it would be desirable to have standardized sizes for keeping in view the convenience of the handling and easy recognition by museum men and scholars from all over the country.

5

Conservation

A. Conservation of Cultural Property

(1) *The Basic Work of Museum and the Role of Conservation*

It is scarcely necessary to enumerate or emphasize the different functions of museums. Nevertheless, at the risk of repetition, these may be listed as (a) collection, (b) documentation, (c) classification, (d) study and research, (e) publication of guides and catalogues, (f) dissemination of knowledge through temporary exhibitions, permanent or long-term presentations or displays, and provision of guide service of varied kinds, (g) ensuring of security of the museum objects against pilferage and damage, and last, but not the least, conservation of the rich heritage in all the disciplines of arts and sciences, without which the museums themselves would not exist.

(2) *Need of a National Policy on Conservation*

The need of a national policy on the development of museums in India in an integrated manner and the scope, need and urgency of utilizing the museums for educational purposes at all levels have been stated earlier. There is likewise the need of a national policy on the conservation of the nation's heritage housed in museums. And its urgency cannot be overemphasized.

The present situation in the country in this very vital field of our common task of preserving and transmitting our heritage intact to posterity deserves special consideration in this context. Museums indeed are the largest repositories of the cultural as well as natural heritage in any country. But their immediate connection with the promotion and dissemination of knowledge, enhancement of general efficiency and potentiality for contributing to the material productivity and prospects in any country is not easily seen. Museums, therefore, seem to suffer from a low priority in the development schemes of all or most nations.

To recapitulate, the museum movement is rather young in India, having begun in the historic city of Calcutta as late as A.D. 1814. By 1911, we could boast of no more than 36 museums. The number grew to 99 in the subcontinent in 1936, accounting also for the museums in present day Bangladesh and Pakistan, which were then integral parts of the British empire of India, and to 174 in 1944. Today the figure for India alone stands at 400. In contrast it may be stated that the total number of museums in U.S.A. has almost run up to 8000, even though it is a much younger country and has a much smaller population than India. It has perhaps a much smaller need of museums for purely educational purposes, especially for the younger people, in view of the higher standards of living and greater environmental backgrounds.

(3) *The Situation of Conservation Laboratories in the Museums of India*

Most of the museums in India do not have the facilities for the preservation of the materials stored or handled by them. This situation may be attributed as much perhaps to the lack of realization, in varying degrees, on the part of the owners or managers of museums, of the need and urgency of conservation, not to speak of its complexities, as the paucity of funds in general. In view of this appalling situation in the context of the forces of destruction constantly working on the objects of 'cultural property' of all kinds, it would be desirable to devise a plan to deal with the problem on an all India basis, even though museums *per se* are a state subject according to the Constitution of India. Government of India have already shown their concern by the passing of the Antiquities and Art Treasures Act and the Wild Life Protection Act in 1972 and by signing in 1970 the UNESCO Convention on the Means of Prohibiting and Preventing Illicit Import, Export and Transfer of Ownership of Cultural Property (1970), as an international counterpart.

It is a commonplace of physics to state that matter can neither be created nor can it be destroyed. We find it in the Upanishadic concept expressed in the following well known lines :

> "*Oṁ pūrṇamadaḥ pūrṇamidaṁ pūrṇāt pūrṇamudachyate* /
> *Pūrṇasya pūrṇamādāya pūrṇamevāvaśishyate* //"

And yet paradoxically we can see before our eyes that matter is constantly changing its shape and form as a result of the interaction between the components of matter with the atmosphere in which it lies. Apart from the factors of heat, light and moisture which affect matter, the toxic gases released by the complicated industrial activity of today have made the situation much worse today. The phenomenon of yellow rain which has been devastating extensive areas in central Europe, the fallout from the terrible accident in the nuclear plant in Chernobyl in 1985 must be disastrous factors to reckon with in this context. The other characteristics of matter like porosity and hygroscopic nature also participate in the process of its degeneration.

But the inexorable process of decay, degeneration and death can be halted or slowed down and the life of the objects prolonged almost indefinitely as a result of human efforts in this direction. Self preservation is one of the most natural instincts of all animals. Human history is an account of ceaseless struggle for existence and it is the fittest who have withstood the test. As a result life can now be lived healthier and longer in general. This instinct and the efforts it has inspired encompasses not merely the human race but the human attitude towards his achievements and heritage as well.

It is largely the museums now that have provided this heritage with a shelter. But the real problem has been posed by the inadequacy in this country of facilities for the scientific conservation of our precious heritage by modern scientific methods. We have about 400 museums in the country, but there are only about 50 institutions (see Appendix), including the branch offices of the Archaeological Survey of India which have some facilities for conservation of cultural property. And not all of these have the same standards of man-power, equipments and training, not to speak of experience, competence or performance.

Furthermore, the existing facilities are not presently adequate enough to deal with the respective institutions' own holdings. That they are really not in a position to offer any help to their less fortunate sister institutions, even though monetary resources may be forthcoming. Their helplessness in the matter of the vastly larger number of objects lying in private possession as family heirloom or personalised collections of the connoisseurs can be easily imagined.

It would not be a revelation to state that the National Museum at New Delhi has more than 200,000 objects in its collection. But its conservation laboratory, perhaps the best equipped in the country, with a trained staff that carries forward the old tradition of the Archaeological Survey of India cannot on an average cope with more than 1000 objects a year or approximately 3 objects a day. This situation arises from the sheer logistics of man-power, optimum utilization of space and equipments, including storage space, and the overriding factor needed for all the operations involved, namely, examination, preparation of records, diagnosis, treatment and return to the sections concerned. This provides us with a rough yardstick of the several factors that are normally involved in the process of conservation. We cannot get away from these fundamental factors unless we want to behave like the proverbial ostrich which buries its head in the sands when a storm sets in to let it blow over. The situation prevailing in the smaller institutions beggars description. Those engaged in the profession as museum directors or curators or conservators know the problems best like the wearer knowing where the shoe pinches.

The profession of conservators of cultural property does not presently seem to be attractive enough. The reason are not far to seek. The scales of pay offered to conservators are relatively low and the promotional avenues are limited even though the profession calls for technical knowledge of the highest quality and skill of the highest order, apart from a high sense of responsibility and integrity and scrupulous dedication.

There are also not enough facilities available till now in this country for training to build up a cadre of conservators of the future, regardless of the importance to the society of their role.

The importance of the conservation of the cultural or natural heritage of any country, and cumulatively of the world itself as a single large human community, cannot be overemphasized. This is so not merely because of the lack of adequate awareness of its significance on the part of the majority of the leaders of the society, barring a few exceptions, and because of the inadequacy of the existing facilities and infrastructure to save them as long as possible from inevitable doom. This situation stems directly from the values we attach to the past. But the recent emphasis on the despatch of massive Festivals of India to foreign countries and the organisation of cultural *melas* (Apna Utsavs) does raise a hope for the forlorn sentinels of our glory regardless of some questionable aspects of such celebrations. The present inadequacies need not, therefore, be set down to lack of awareness of the crying needs of the past or callous indifference in varying degrees in spite of it, but probably to pressures on our limited resources at this stage of the development of the nation when the present with all its ramifications of development, internal problems of a varying kind, international relations and the nations' prestige and image abroad is besides the needs of defence under great pressure.

Nevertheless, the importance of 'conservation work' in all its ramifications as a discipline and a profession calling for very precise and scientific knowledge of the highest standards in regard to the diverse causes of decay and in regard to the preventive and remedial measures cannot be stressed too much. That it should be given its rightful place as an insistent and expansive national activity in the interest of the sheer emotional survival of the nation's personality has to be stated. In fact, to say the least on the subject, conservation of a nation's heritage as a contributory segment of the universal heritage is the crying need of the hour. It must not be allowed to dwindle into a cry in the wilderness in view of the priorities that we may have set for ourselves.

In this context it may be relevant to quote from the writings of the late Dr. Grace Morley, formerly Director of the National Museum (1960-66) and later Permanent Adviser to the International Council of Museums, Regional Agency in Asia, in regard to the role that the Government of India had assigned to the Conservation Laboratory of the National Museum.*

"The largest museum conservation laboratory in the country is that of the National Museum, New Delhi, which has a staff of trained and experienced scientists and technical experts and is fairly well equipped with scientific apparatus required for analytical and practical work in a modern conservation laboratory. Its senior personnel have all been trained abroad and have had long experience of the special materials and conditions of such work in India. At first, the laboratory's activity was confined principally to work for its own museum and occasional first aid or emergency work for others, and, if the material was of sufficient importance, even for private collectors and for neighbouring countries."

"It is (*was indeed*)** being (*gradually*) developed as a Central Museum Conservation Laboratory to serve all museums in India, provide counsel and, when required, supervise their laboratories and workshops. It also (*used to undertake*) undertakes a certain amount of training of personnel from other museums in the basic requirements of conservation and give general leadership to the profession."

But in March 1976, the role of the National Museum in this regard was somewhat

*Grace Morley, 'Museums of India', *Museum* (ICOM), 1965, p.

**Portions in italics within brackets have been added by the author.

modified and even somewhat diluted, and a new National Laboratory for the Conservation of Cultural Property was brought into being. This was to serve as an institution that could devote itself exclusively to the training of museum personnel in the basic principles and practices of conservation and to researches on different aspects and facets of the conservation of all kinds of cultural property. This institution has since been shifted to Lucknow, and very recently it has been permanently housed in the newly built large complex of Central Government institutions in Lucknow.

The creation of this institution is indeed a landmark and a step in the right direction. This is so because the direst need of the hour is the training up of a large number of conservation personnel in the basic principles and practices of conservation and the setting up of conservation laboratories to cope with the enormous volume of work that looms in the horizon. To begin with these should form part of the State Departments of Archaeology, the larger museums of multi-disciplinary nature, situated mostly at the State capitals, and the archival offices and manuscripts libraries throughout the country. Even the initial first step suggested here would take several years to accomplish, for even if space and equipments are acquired, the trained man-power needed to use them cannot be produced overnight. It may be mentioned in passing that the National Museum too continues to impart in-service training for advanced museum personnel in a few specific fields. But despite the high quality of the training courses at these two institutions and the dedication and efficiency with which they are conducted, the total number of persons they can handle or train each year, in keeping with their own museological, conservational or research oriented experiments, as the case may be, is rather small in comparison with the actual needs of the country.

In this context it would be interesting to record that even as far back as 1960, a small country like Belgium spent as much as 200,000 dollars (about Rs. 26 lakhs) per annum on its conservation laboratories. This is only an index of the actual need of conservation in India which is so much larger than Belgium, and where the tropical climate with its extremes of heat and moisture is so much more destructive than the continental climate of extreme cold. That the realistic estimate of essential expenditure on conservation in India, after nearly three decades, would be very much higher can be easily imagined.

As regards training of the personnel it is indeed true that practical training of scientific personnel in the complicated task of conservation is much more useful than any amount of theoretical instruction on the subject. Nevertheless, it would be worthwhile to consider the possibility of the institution of instructional courses on the theory and practice of conservation as a faculty discipline in the Indian Universities, if only to prepare a sound foundation for the advanced practical courses that are being taken care of by the Governmental institutions such as the National Research Laboratory at present. These courses may be introduced verily limitedly, say in one or two centres, to begin with so that there may not be a glut of conservation personnel without the infrastructure of laboratories to absorb them.

One of the chosen University centres may be encouraged to build up a Central

University Conservation Laboratory for analytical and applied research, conservation of museum objects as well as for practical training. The Banaras Hindu University has already built up an excellent multipurpose museum called the Bharat Kala Bhavan. One of its wings may perhaps be made to serve as a gallery of conserved objects to function as visual symbols of the work done. This may pave the way for founding similar centres at other places in course of time in the light of the experience gained and in keeping with the requirements of the profession. In fact, the Centre of Fine Arts at the University of New York has such a faculty with facilities for training in the different fields of conservation of art heritage.

The practical aspects of the employment potential of University-trained personnel in the discipline of conservation cannot be overlooked before a scheme is launched. Already there is an enormous shortage of laboratories and personnel. It would be quite some time before the lacunae is filled. Moreover museums are growing institutions both in terms of volume and number, and the need for conservation would also be growing along with them. A far larger volume of vulnerable cultural property in the form of manuscripts, paintings, textiles, metals, coins, leather goods and wooden objects etc., still continue to be with institutions or individuals who cannot afford to submit their heirlooms or personal collections to the expensive and time-consuming process of conservation. First of all there are practically no individual private conservators in this country, and institutions can ill afford to undertake such works for private or even institutional collections without impairing their own works. The University Centres of Conservation may, however, take up the conservation of materials in the possession of such individuals against some payment, and the money receipts may meet part of the expenses to support the scheme.

(4) *The Relative Importance of the Roles of Diverse Museological Activities*

One may recall the age-old story of the quarrel among the different limbs of the human body in regard to their relative greatness. It did not take them long to realize that all of them were interlinked and equally important. Likewise all the different activities of a museum are interdependent and interlinked and are equally important. But the basic elements are the objects themselves. If they do not exist, or are not conserved, soon there will be nothing left to study, classify, evaluate, assess, document, publish, display and use for educational purposes even with the best techniques, means, skills, vision and efficiency to look after all these activities at our command. And there will be no museum to talk of. In recent years Government of India have been holding large-scale Festivals of India in foreign countries with a view to promoting true knowledge of Indian culture abroad. They have indeed their plus points, notwithstanding the staggering expenses and risks involved. But if the objects of our cultural heritage cannot be conserved there would be nothing to celebrate the festivals with.

(5) *Summary*

The primary need of the hour, therefore, is to increase the number of conservation modified and even somewhat diluted, and a new National Laboratory for the Conservation of Cultural Property was brought into being. This was to serve as an institution that could devote itself exclusively to the training of museum personnel in the basic principles and practices of conservation and to researches on different aspects and facets of the conservation of all kinds of cultural property. This institution has since been shifted to Lucknow, and very recently it has been permanently housed in the newly built large complex of Central Government institutions in Lucknow.

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(5) *Summary*

The primary need of the hour, therefore, is to increase the number of conservation laboratories in a standardized manner and on a national scale and to man and equip them adequately and properly. A beginning may be made by setting up a large laboratory in every State. These may serve as the nuclei of branches that may be built up in course of time in the outlying areas. Whether the Central Government takes up the problem or the States come into the picture is immaterial, as long as the principle of the suggestion is accepted. In view of the pre-eminent position attained in the field by the National Research Laboratory for the Conservation of Cultural Property any further step may be taken in consultation and coordination with it. While the National Research Laboratory would surely extend the facilities of its training courses to a larger number of personnel and also both diversify and intensify its courses, the University system should also make a beginning in the direction by introducing a suitable curriculum and instructional courses as part of the Visual Arts Faculty, particularly if happens to have a Museum of Arts and Craft as well.

Next to the laboratories, they must be equipped adequately with trained men and equipments so that they may function properly. The third step, which has already been anticipated, should be to provide adequate facilities for proper training of the in-service personnel as well as fresh men in the principles and practices of conservation, both at home and abroad, under the guidance of the ablest conservators, wherever they may be.

In order to hold the trained technical staff in the institutions with a view to ensuring the continuity of tradition and standards, they should be paid adequately so that they are not tempted to leave the institutions for better paid jobs elsewhere and may also look forward promotional avenues within the institution itself.

APPENDIX

Conservation Facilities in Indian Laboratories

The conservation and restoration of damaged museum objects is being done in India in 50 laboratories as per details below :—

1. Archaeological Survey of India, Dehra Dun (Central Laboratory)
    (i) Murals
    (ii) Monuments
    (iii) Stone sculptures
    (iv) Excavated antiquities
2. Archaeological Survey of India, Hyderabad (Regional Laboratory)
    (i) Murals
    (ii) Monuments
    (iii) Excavated antiquities

3. Archaeological Survey of India, Agra (Zonal Laboratory)
    (i) Murals
    (ii) Monuments
4. Archaeological Survey of India, New Delhi (Zonal Laboratory)
    (i) Murals
    (ii) Monuments
5. Archaeological Survey of India, Chandigarh (Zonal Laboratory)
    (i) Murals
    (ii) Monuments
6. Archaeological Survey of India, Patna (Zonal Laboratory)
    (i) Murals
    (ii) Monuments
7. Archaeological Survey of India, Bhubaneshwar (Zonal Laboratory)
    (i) Murals
    (ii) Monuments
8. Archaeological Survey of India, Dhar (Zonal Laboratory)
    (i) Murals
    (ii) Monuments
9. Archaeological Survey of India, Aurangabad (Zonal Laboratory)
    (i) Murals
    (ii) Monuments
10. Archaeological Survey of India, Ajanta (Zonal Laboratory)
    (i) Murals
    (ii) Monuments
11. Archaeological Survey of India, Madras (Zonal Laboratory)
    (i) Murals
    (ii) Oil Paintings
    (iii) Monuments
12. National Archives of India, Bhopal (Record Centre)
    (i) Manuscripts
    (ii) Records
13. National Archives of India, New Delhi (Central Laboratory)
    (i) Manuscripts
    (ii) Records
14. National Museum, New Delhi
    (i) Paintings

  (ii) Manuscripts
  (iii) Metallic Objects
  (iv) Sculptures
  (v) Textiles & Decorative Arts
  (vi) Ethnographic collection
  (vii) Bone, ivory, leather and parchment
  (viii) Wooden objects
  (ix) Mural Paintings

15. National Gallery of Modern Art, New Delhi
  (i) Oil Paintings
  (ii) Tempera paintings and drawings

16. Salarjung Museum, Hyderabad
  (i) Paintings
  (ii) Ceramics
  (iii) Manuscripts
  (iv) Oil paintings
  (v) Miscellaneous objects

17. National Archives of India, Jaipur (Record Centre)
  (i) Manuscripts
  (ii) Records

18. Indian Museum, Calcutta
  (i) Coins and other objects of metal
  (ii) Paintings
  (iii) Sculptures
  (iv) Decorative Arts and Textiles
  (v) Miscellaneous objects

19. Prince of Wales Museum, Bombay
  (i) Oil paintings
  (ii) Paintings
  (iii) Miscellaneous objects

20. Government Museum, Madras
  (i) Bronzes
  (ii) Sculptures
  (iii) Decorative arts & metallic objects
  (iv) Miscellaneous objects

21. State Museum, Lucknow
  (i) Sculptures
  (ii) Metallic objects

(iii) Textiles & decorative arts
(iv) Miscellaneous objects

22. Patna Museum, Patna
    (i) Bronzes
    (ii) Paintings
    (iii) Terracottas
    (iv) Miscellaneous objects

23. Museum & Picture Gallery, Baroda
    (i) Oil paintings
    (ii) Manuscripts
    (iii) Paintings
    (iv) Metals
    (v) Sculptures
    (vi) Miscellaneous objects

24. State Museum, Jaipur
    (i) Murals
    (ii) Sculptures
    (iii) Paintings
    (iv) Metals
    (v) Miscellaneous objects

25. Patiala Museum, Patiala
    (i) Paintings
    (ii) Sculptures
    (iii) Natural History

26. State Museum of Orissa, Bhubaneshwar
    (i) Metals
    (ii) Paintings
    (iii) Miscellaneous objects

27. National Research Laboratory, Lucknow
    All types of objects (cultural property)

28. Victoria Memorial Hall, Calcutta
    (i) Manuscripts
    (ii) Miscellaneous objects

29. Vrindaban Research Institute, Vrindaban
    (i) Manuscripts
    (ii) Miscellaneous objects

30. National Defence Academy, Khadakvasla, Pune
    (i) Arms
    (ii) Textiles
    (iii) Paintings

31. State Chandradhari Museum, Darbhanga
    - (i) Metals
    - (ii) Sculptures

32. National Library, Calcutta
    - (i) Books
    - (ii) Documents

33. Crafts Museum, New Delhi
    - (i) Paintings
    - (ii) Textiles
    - (iii) Decorative Arts & Crafts

34. Nehru Museum & Library, New Delhi
    - (i) Books
    - (ii) Documents
    - (iii) Photographs, etc.

35. Deptt. of Archaeology, Haryana Government, Chandigarh
    - (i) Metals
    - (ii) Miscellaneous

36. Deptt. of Archaeology, Andhra Pradesh, Hyderabad
    - (i) Sculptures
    - (ii) Metallic objects

37. Deptt. of Museums & Zoos, Trivandrum
    - (i) Natural History
    - (ii) Metals
    - (iii) Miscellaneous objects

38. National Museum of Natural History, New Delhi
    - (i) Natural History

39. Visva-Bharati, Rabindra Bhawan, Santi Niketan
    - (i) Paintings
    - (ii) Archival materials
    - (iii) Metals

40. Gaya Museum, Gaya
    - (i) Stone
    - (ii) Metals

41. Directorate of Archaeology, Bihar
    - (i) Metals
    - (ii) Sculptures

42. Directorate Museum & Archaeology, Punjab Government, Chandigarh
    - (i) Stone
    - (ii) Metals
    - (iii) Miscellaneous objects

43. City Palace Museum, Jaipur
    - (i) Paintings
    - (ii) Textiles
    - (iii) Decorative Arts, etc.

44. Directorate of Archaeology & Museums, Madhya Pradesh State, Bhopal
    - (i) Metals
    - (ii) Sculptures

45. Directorate of Historic Archives, Archaeology and Museums, Panji, Goa
    - (i) Records
    - (ii) Paintings
    - (iii) Miscellaneous

46. Directorate of Culture, Lucknow
    - (i) Monuments
    - (ii) Excavated objects
47. Birla Museum, Bhopal
    - (i) Miscellaneous objects

48. Asutosh Museum, Calcutta
    - (i) Miscellaneous objects

49. Govt. Museum and Venkatappa Art Gallery, Bangalore
    - (i) Paintings
    - (ii) Miscellaneous objects

50. Bharat Kala Bhawan, Varanasi
    - (i) Paintings
    - (ii) Sculptures
    - (iii) Metals
    - (iv) Textiles

B. Some Essential Aspects of Conservation

(1) *General Decay of Objects*

All objects, organic or inorganic, are subject to decay. If they have to be preserved, for as long as it may be possible humanly to do so, as examples and evidences of the technical aesthetic and utilitarian achievements of the past and transmitted to the future generations, the process of decay must first be arrested. It may be slackened, if inevitable, and put off. Meanwhile the damages that have already occurred must be made good as far as possible by the scientific means at our command.

The objects themselves can be broadly categorized as organic and inorganic, respectively, as indicated above. Organic objects comprise those that owe their existence to living organisms of one kind or another, such as (i) wood, (ii) cotton, (iii) silk, (iv) leather, (v) fur, (vi) ivory, (vii) bone, (viii) paper, (ix) parchment, (x) vellum, and (xi) palm leaf, etc. Inorganic objects comprise those that are not derived from living organisms, and include metals, minerals and stones.

The causes that induce their degeneration and decay are many and may be broadly grouped under (a) natural causes and deliberate; and (b) accidental acts of destruction arising from human intervention respectively. Under the former are (i) heat, (ii) light, (iii) humidity which belongs to the broader category of climate, (iv) dust, and (v) atmospheric pollution. Under the former are also many natural causes such as lightning strokes, floods and excessive rains and earthquakes etc. Under the category of other causes are (i) vandalism, (ii) fire due to short-circuiting, or deliberate incendiarism or bombing as in war time, (iii) negligence in handling, and (iv) accidents *in situ* or in transit.

(2) *Heat*

Heat, whether it arises from the sun, fire or electricity, affects the objects through the action of expansion and contraction. If the changes are rapid, the margin of difference is large, as a result of which the cohesion of the objects is weakened, and the objects tend to tear apart. There are several effective steps that are possible to take to reduce the intensity of heat, such as introduction of a draft of cool air using infra-red filters for certain kinds of light and by the introduction of separate cabinets for light in the case of showcases. These have been discussed in greater detail below.

(3) *Light*

Light is a major source of damage to most categories of museum objects. But the importance of safeguards against the deleterious effects of light is little realized in Indian museums and practically no action is being taken in this regard in most museums in India today. Light, however, is needed and employed to illuminate the objects in any museum for viewing or for photography. The phenomenon of light cannot, therefore be eliminated as it is absolutely essential for seeing any object. The late Paul Coremans, well known conservator of cultural property, had stated, "It can be postulated that all light, whether visible or invisible, natural or artificial is a cause of deterioration. Sooner or later the illuminated matter, which is sensitive to light, must deteriorate and finally disappear. The process may continue over several years or centuries, according to the duration and intensity of exposure, the type of radiation and the kind of object illuminated."

The three main sources of light are (i) day light or sun light, (ii) the incandescent lamp, and (iii) the tubular fluorescent lamp respectively. All these sources of light radiate rays. These rays are of the nature of electromagnetic energies. The rays themselves are composed of both visible and invisible radiations. The visible radiations, as is well known, can be analysed as a combination of the seven colours of the spectrum, and are identified as violet, indigo, blue, green, yellow, orange and red, respectively.

But the total range of radiations is composed of the following radiations of visible and invisible radiations :

Cosmic rays	Gamma rays	X-rays	Ultraviolet rays	Visible light	Infra-red rays	Hertzian waves
				(VIBGYOR)		Radio Television

In regard to the museum objects we are concerned with the visible rays and the invisible ultra-violet and infra-red rays, respectively. The unit of measurement of the intensity of light is called a *photon.* A *photon* is a bundle of electro-magnetic radiant energy which is absorbed by an object on which it falls. Thereafter it loses the energy through one or more of the five processes mentioned below, namely, (i) heat, (ii) emission of fluorescence, (iii) chemical change within the molecule through structural change as a reaction with oxygen and water vapour, (iv) breaking of the chemical bonds of the molecules of the object, and (v) collision with the neighbouring molecules resulting in dissipation.

These processes are collectively called photo-chemistry. The actual process by which the photo-chemical action is induced is the activation and excitation of the molecules by every 'photon' that is absorbed and is generally known as Stark-Einstein Law. It may be noted, however, that no photo-chemical change takes place through the first two processes, namely, through heat and fluorescence, respectively. These give rise to physical change through heat when it oversteps the limits of toleration. The emission of heat results in a reduction of moisture and drying up of the structure of the object, warping and cracking, especially in materials like wood, bone, ivory and paper, etc.

The photo-chemical damages are mostly caused by the ultra-violet rays. The longer wavelengths of infra-red radiation causes practically no photo-chemical change, though its capacity for harm by the induction of heat remains. Furthermore, the intensity of damage, whether by heat or by photo-chemical change, depends not merely upon the intensity of light but also upon the duration of exposure under a law called the law of reciprocity. For example, the damage that may be caused by the same intensity of light affecting or radiating upon an object for one minute would be halved if the exposure remained for half a minute and would be doubled if the exposure was increased to two minutes. The tolerable limits of various kinds of objects to exposure to light has been calculated in terms of "lux", which is a measure of the intensity of light.

The luxmeter which measures the intensity of light is in fact a photo-cell, which converts the light that strikes it into electricity and records its intensity upon a calibrated scale, and it is called illuminance.

The tolerable limits of visible light, which exercises its harmful effect through radiation of heat has been found to be 50 lux in the case of the most delicate categories of objects, e.g. (i) dyed textiles, (ii) miniature paintings, (iii) water colours, (iv) paper manuscripts, (v) prints on paper, (vi) drawings on paper, and (vii) coloured leather.

The tolerable limits of visible light on oil paintings and undyed leather has been found to be 150 lux.

Most other objects like stone and metals are able to withstand the intensity of visible light up to 300 lux.

The light sources can be chosen accordingly and monitored with the help of a lux-meter.

It is often thought that day light, if not direct sun light can be the least harmful. But it must be remembered that the sun's rays have the maximum ultra-violet radiation. The incandescent lamp has little or no ultra-violet radiation, but generates intense heat as the tungsten wire used in the lamp has to be electrically heated to 2700°C to produce light. It is, therefore, desirable to avoid incandescent lamps for museum lighting for not merely does it convect heat upon the objects but also upon the air inside the museum and has its direct effect upon relative humidity as well.

The tubular fluorescent lamps are filled with mercury vapour and when an electric current is passed through the tube it produces light. This light by itself does not produce much heat but gives rise to ultra-violet radiation. The chokes and starters of the tubes do produce some heat but it can be controlled, and its effects minimised.

Since it is the ultra-violet radiation that causes the maximum extent damage through photo-chemical changes, it must be eliminated at all costs. This can be done in various ways, namely, by the use of filters in the form of glass sheets coated with ultra-violet absorbing chemicals or similar acrylic perspex or plexi-glass with an ultra-violet absorbing coating, cellulose acetate foils or glass sheets coated with ultra-violet absorbing varnish, etc. At the same time the absence or elimination of ultra-violet radiation should be ensured through an ultra-violet monitor, which records the extent of ultra-violet radiation in terms of microwatts ultra-violet radiation per lumen of visible light.

In a museum a device to eliminate ultra-violet radiation can be adopted by the installation of a trough below the tubes with its inner sides coated with an ultra-violet absorbent coating. The light falling on the trough will then be reflected on the flat ceiling. The ceiling likewise or the required part of it can be suitably coated with ultra-violet absorbing material so that the resultant light is not merely reflected and diffused but produces a pleasant effect of soft lighting, besides being free of ultra-violet radiation. But the efficacy of the coating has to be periodically checked with the ultra-violet monitor, and if necessary the ultra-violet coating renewed from time to time.

Where, however, the modern equipment cannot be afforded or are not readily available the best course to adopt would be to use a light source with low intensity of light. In addition a translucent or opaque barrier, or even a plain glass barrier may be used as all these would help to reduce the intensity of light as well the quantum of ultra-violet radiation. The resultant effect would be retardation of the process or progress of degradation of museum objects. It may be remembered that photo-chemical damage is irreversible.

It was mentioned earlier that the long-wave infra-red radiations also gave rise to heat. The incidence of the harmful effects of heat from infra-red radiation can be similarly eliminated by the use of infra-red filters. This effect can be further enhanced by forcing a draft of cool air upon the objects, taking care to ensure that this procedure does not raise the relative humidity in the area beyond the tolerance level. It must also be ensured that the cool air thus introduced is made to circulate evenly to prevent an imbalance in the temperature and relative humidity in the concerned area of the museum.

However, a good deal of damage is being done to the vulnerable or naturally susceptible objects of cultural heritage through exposure, often repeated, to intense lighting for unduly long periods in the process of photography for routine documentation work and publication, especially in colour.

This invites physical action through heat, especially when exposed to sunlight (as is often done) and unguarded photo-chemical action through ultra-violet radiation on an extensive scale. The statement of O.P. Agrawal, Director of the National Research Laboratory for the Conservation of Cultural Property, Lucknow in this connection is very relevant. He says, "I have often seen people photographing delicate objects like miniatures in direct sunlight".* Nothing can be more dangerous than such methods especially in respect of paintings or textiles. That such practice has been allowed even in some national institutions can be endorsed by the author's personal experience. In fact some well known scholars of high social status have often argued with the author (when in the National Museum) for allowing them to take photographs of vulnerable objects in direct sunlight. The matter of setting up permissible limits of the intensity of light to which objects can be exposed was considered in depth by a committee of the I.C.O.M. named as the ICOM Conservation Committee, Lighting Group. It worked out the norms for such work. They suggested the exclusion of all kinds of light for photography except electronic flash lights as these were found to be least harmful. The other conditions recommended by the committee were as follows :

(1) No more than two sources of electronic flash should be used.
(2) The total energy from both the flashes should not be more than 1400 joules (watt seconds).
(3) The two flashes should not be placed closer than three meters from any point of the object photographed, or any neighbouring museum objects.
(4) The flash source should be covered with a filter which may absorb all radiations shorter than 380 nm, i.e., all ultra-violet radiations.
(5) There should not be more than one exposure in a minute for the same object.

It is also recommended by various sources that the surface temperature should not be raised by more than the heat generated between 3 and 5°C.

These norms, unfortunately, are not generally being followed in most museums in India, owing either to their ignorance of these recommendations or lack of knowledge of the equipments required for enforcing the norms or lack of the required infrastructure or ability to insist upon the adherence by the visiting public strictly to these rules, or the absence of any specific guidelines on the subject.

Some museums like the Prince of Wales Museum do not permit any photographic work by the visitors (the museum undertakes to supply the required photographs against payment obtained in advance). Most western-museums follow the same practice. It is certainly the ideal rule in the interest of the safety of the museum objects. But it implicitly implies the responsibility to photograph the object well both in black and white and in colour, and supply them to scholars and others within a reasonable period after the firm orders have been received.

The objects that most scholars would like to photograph for study, research, publication or for mere collection for aesthetic pleasure are the miniature paintings which are mostly executed on paper. It is regrettable that the precautions regarding lighting are rarely observed by those who take the photographs. These are also photographed repeatedly. The irreversible harm that can accrue to the paintings as a result is incalculable.

The remedy for the situation would be in the following :

(1) completion by every museum of the photographic documentation of all its objects under carefully controlled conditions on a basis of priority;
(2) completion of the index cards;
(3) preparation of photo-albums with photographs of adequate size for viewing;
(4) preparation of colour slides for viewing; and
(5) preparation of colour transparencies on requisition for purposes of publication of the selected items.

Till these steps are taken the problems relating to the repeated handling of the painting, exposing them for varying periods to natural or artificial light and to the hazards of ultra-violet radiation.

Frequent handling of objects, especially the organic ones, also adds to the accumulation of dust and moisture, which are also causes of damage. Therefore, it would be desirable for all museums containing miniature paintings or paintings of any kind such as oil paintings, pichhwais, *thankas*, and textiles, etc., for that matter, to throw open only their archives of documentation to begin with to the scholars and limitedly to the originals in the reserves, after the photographs have been studied so that the risks of frequent exposures to light may be reduced.

Sometimes the museum objects are required to be filmed or televised for educational and allied purposes. The intensity of the lights required and used for such filming is often too high and cannot but damage the delicate and vulnerable objects. In all such cases the yardsticks of permissible limits of lighting or illuminance and monitoring of the ultra-violet radiation must be strictly adhered to.

Colour photography in general requires a very high intensity of light. Strong light generates a good deal of heat through infra-red radiation. Colour photography in museums must, therefore, be undertaken together with infra-red filters. An additional step to introduce and circulate cool air to further lower the temperature must also be taken. Nowadays photographic lamps are often fitted with heat reflectors that reflect the heat backwards, but the use of such lamps is likely to raise the room temperature by convection, and eventually raise the temperature of the objects themselves.

The importance of controlling the lighting in museums on all occasions with utmost strictness and the use of infra-red and ultra-violet filters cannot be overemphasized. This is so because the photo-chemical damage that may otherwise occur is irreversible.

It is often noticed that the lighting system is integrated with the showcases in Indian museums. In such an arrangement the heat generated by the light is turned directly from a close range on to the objects it illuminates, and it is also trapped inside. If the heat is beyond the limits of toleration and is otherwise uncontrolled, its capacity and potential for damage can be easily imagined. Under the circumstances, it would be safer and, therefore, desirable to have a separate cabinet for the lighting and also to provide infra-red and ultra-violet filters, besides an arrangement for cooling the temperature in the area concerned through a draft of air.

(4) *Moisture*

Moisture affects the objects in various ways. If the relative humidity is less than the permissible limit, molecular changes take place and the objects get weakened. If on the contrary it is more than the tolerable limit molds or fungi grow on the objects and they begin to eat up and destroy the organic objects. Heat and moisture, however, are interrelated. The optimum relative humidity for each category of object has been more or less worked out. Lower the heat higher is the relative humidity, and conversely higher the heat lower is the relative humidity. It has been held that heat giving rise to a temperature of 18-20°C and relative humidity varying from 40 to 65% would suit most objects. For wooden objects the relative humidity should not fall below 35°C, otherwise they would start cracking and splitting. Apart from the control of temperature and humidity the use of a wax bath serves to save wooden objects.

Textiles and related materials, which in certain ways are among the most vulnerable organic objects in our museums, are not often as much taken care of as they deserve. Whether of cotton, wool silk or linen, they are susceptible to both to temperature and moisture.

Excessive moisture weakens the fabric and allows the growth of insects which begin to feed upon the cellulose of the material. It is often not recognised that they need to be washed with distilled water together with a non-ionic detergent (1%) so that all traces of direct, grit and stains are removed after making sure that they are rendered colour-fast and gently dried.

To reduce the moisture content of the environment enveloping an object on display or kept in storage use is often made of substance called *silica gel*. It is kept in a container, usually a cloth sack, and placed at one unobtrusive corner of the showcase or cabinet containing the objects. *Silica gel* absorbs moisture and helps reduce the relative humidity. In order to ensure that the quantum of moisture in any enclosed area does not fall below the required norm regular monitoring has to be carried by the introduction at least of wet and dry bulb thermometers in the involved area. These measure at once the interrelated phenomena of temperature and relative humidity. Even more sophisticated and elegant instruments that record the two items simultaneously all through the day and night on a graph wrapped round a slow moving drum or cylinder. Such instruments are placed inside a showcase and the records of temperature and humidity can be observed at any time and corrective action taken accordingly by the introduction of more heat or moisture, or even by its reduction according to necessity.

The ideal arrangement for the introduction of the optimum extent of temperature and relative humidity, respectively, in the form of air-conditioning is of course the best answer. But such plants are costly to instal and to maintain. It must also be run and monitored for 24 hours, round the clock, continuously all the year round and for all times to come. Otherwise more harm would be done to the museum objects than good. Objects exposed to widely varying conditions of climate suffer far more damage than when they adjust themselves to the normal and natural changes in the climate.

Though today it may appear to be grossly expensive to introduce air-conditioning in the museums of India, particularly the smaller museums, there can be no doubt that this amenity will become as common as flying by air in the not too distant future. The expenses that may be incurred on their installation and maintenance may be realized in course of time by the introduction of an adequate admission fee in all places where such admission is free today or for a nominal fee. Free access to a museum seems to be an axiomatic claim and right of people in India. While it is not so in the affluent societies elsewhere, as the society recognises the expenses involved in the preservation and transmission of heritage and is prepared to pay for the services rendered by museums. The museums in or of the future would, therefore, be the beneficiaries of the speedy removal of penury, a policy on which the present government is hell-bent. Nevertheless it will be economical in the long run to introduce the needed devices right away in order to prolong the life of the material remains of our heritage.

(5) *Dust*

Dust also leads to the deterioration of museum objects through the action of corrosive substances that they may contain as well as by the formation of cakes in combination with moisture, which permeates the texture and remains on the surface as a film, thus becoming an integral part of the fabric. It also harbours and promotes the growth and proliferation of micro-organisms into the texture of the objects, particularly when the moisture is excessive.

Dust comes into a museum building in a variety of ways. Atmospheric dust comes in with the air and rather in larger quantities with a dust storm or with sudden gusts of wind. A lot of dust is deposited daily by the tramping of the shoes or even the bare feet of the visitors.

The usual method of sweeping the floors of museum galleries or stores in vogue in most Indian museums, namely, with broomsticks, does indeed help remove the surface dust to an extent but never fully. A part of the dust goes up and gradually and imperceptibly settles down again upon the floors and show cases as well as on exposed museum objects. The dust penetrates through the chinks and openings in the furniture. Though this effect has been minimised somewhat by the practice of mopping the floors periodically, which has been adopted largely now, really satisfactory results cannot be achieved except with the modern means of employing vacuum cleaners. They are not only much more efficient and quicker, they are elegant and economical in the long run.

Though most museums try to finish the cleaning operations before the visiting hours begin, it is not unusual to see broomsticks (*jhārus*) being plied even when the visitors have started filling in and islands and piles of trash greeting them here and there. This task must, however, be completed before the visiting hours. The use of vacuum cleaners in combination with mopping up would serve the purpose well. The work can be carried out periodically according to necessity say once or twice even during the museum hours without causing much distraction. Care must also be taken to ensure that excessive moisture is not introduced thereby. The provision of foot mats at the entrance points also help to keep the level of dust in a museum a little low.

Most museums in India observe one day in the week as a closed day. Some museums observe Sundays as closed holidays, others observe Fridays. Most museums in India, however, observe Monday as a closed day for visitors but not for the staff. The day is used for various house-keeping purposes, such as checking up of the objects, cleaning up of galleries, shelves, glass panels of showcases, stands for the objects hand rails of the barriers, the stair-cases, and every nook and corner of the museum thoroughly. All these jobs can be done in peace and quiet on the closed day in the absence of the visitors. In some museums the furniture, often ornamental, and metal-works of the fittings are cleaned and polished, and the floors thoroughly scrubbed and waxed. This is a day on which the functioning of all the equipments such as the electrical connections and fittings, the air-conditioners, the fire safety devices, the burglar alarms, etc., can be checked and all deficiencies rectified. In some museums this practice has not been properly introduced or is not being followed. It would be a healthy practice for all museums to introduce this system. The museum objects on display and in the galleries must also be regularly cleaned and gently dusted with suitable equipments according to the category of the objects concerned. No efforts, in short, should be spared to minimise the incidence of dust upon the museum objects.

(6) *Salts, Gases and Smoke*

No less destructive than dust are salts, gases and smoke that fill the atmosphere in modern cities, and to the reduction of the effects of gases and smoke of different kinds constituting the hazards of modern life we must now turn.

To pick up the thread again of the essential requirements of conservation, it may be stated that stones, minerals and metals are not much affected by heat or moisture.

But some stones are porous in structure and harbour salts and chemicals. In the presence of moisture the salts and chemicals get dissolved and they tend to flow out and result in efflorescence, flaking and cracking. The situation is aggravated by the corrosive gases or such substances as are present in the atmosphere in the highly industrialized areas, where the chimneys of the factories belch out all kinds of corrosive waste along with the smoke. This is a hazard which can be best avoided by not locating museums in such areas, or by not setting up factories in the neighbourhood of museums. The case of the gases rising from the various foundries affecting the texture, fabric and colour of the marble slabs on the Taj Mahal is well known. The authorities in charge of town-planning as well as those responsible for locating industrial establishments have to bear this in mind. In fact all the authorities involved in such activities must work in coordination as they are equally the beneficiaries of the repositories of our cultural, natural, scientific or technological heritage.

Sometimes the sea winds laden with salts affect the objects in the museums situated near the seashore. There are several such museums in India such as the Prince of Wales Museum at Bombay or the Fort Museum at Madras. Though it has often been claimed that sea windows do not substantially affect the objects housed in them, such claims are in reality unfounded. It is necessary to undertake scientific studies on the effects of sea winds on museum objects such as those of metal, wood, stone and all categories of organic materials, especially the textiles and paintings and make comparative records of the states of preservation over a number of years.

Metals, which are affected by chemical compounds resulting from contact with carbonic acid in the moisture or with corrosive substances in the atmosphere prevalent in the shore must be cleaned, deacidified and treated for the prevention of the spread of the disease such as the "bronze disease" and its recurrence. Such works can, however, be taken up only by an experienced conservator. Objects not on view, can be wrapped up with polythene, after treatment, for safety.

(7) *Termites*

One of the most destructive sources of damage to museum objects of organic material is the termite. The eradication of termites needs a specialised and comprehensive treatment involving the entire museum building. It should, therefore, be entrusted to the professional experts with an arrangement for periodical checking and repetition of treatment for the prevention of termite infection.

(8) *Gardens*

Gardens and lawns around a museum play a significant role in the conservation of museum objects. Tall trees and hedges as well the flowering plants and grassy lawns serve as a buffer, or the first line of defence against dust, serving a filter. Watering of the lawns make them moist which further reduces the incidence of dust. They also serve to lower the temperature of the surroundings.

Incidentally, the museum becomes much more attractive if surrounded by a garden and greenary. The Prince of Wales Museum in Bombay, the State Museum at Trivandrum, the National Museum and the National Gallery of Modern Art at New Delhi, the Tipu Sultan Museum at Srirangapatnam (Karnataka) and the Bharat Kala Bhavan at Varanasi are some of the excellent examples of the ideal. But in their enthusiasm the museum directors in general often grow thick bushes and even tall trees too close to the museum building. This practice must be avoided at all costs. In a tropical country like India such bushes and plants can be ideal hideouts of dangerous reptiles.

These may occasionally find their way into the museum building in the trail of rodents which gain access into the museums in search of crumbs of food.

Over-watering of the lawns adjoining the museums may make the lawns marshy and render them still more dangerous to human life. Such situations may even discourage the night watchmen from going round the museum building out of fright, and may weaken the security system of the museum.

Tall trees must not also be grown too near the museum buildings, because anti-social elements may use them for gaining access into the museum building for burglary and pilferage, if not for vandalism. Though the note of caution sounded in this context is more out of consideration for security in a larger sense it would help the conservation of museum objects against possible damage, destruction or theft.

(9) *Storage Conditions*

It is often not realized that the storage of museum objects is as important as presentation for display in the galleries or exhibitions. But storage is very often neglected for lack of adequate space, or planning or forethought. In fact, the museum being a growing institution the storage of supporting materials and equipment and the museum objects themselves should be planned for in advance with considerable forethought in regard to its location, accessibility, to the curatorial staff, ventilation illumination, nearness to the galleries, facilities for retrieval for purposes of study, verification, photography and conservation measures, besides transportation to the exhibition galleries, and above all fool-proof arrangements for security. The space must also lend itself to facilities for effective control of heat, light and moisture, all in the interest of conservation. It should not be considered as unusual to set aside at least 50% of the total space in a museum for storage. Even this would appear to be too small considering that, in most museums it is not possible to display more than 10% of the holdings. It should be admitted here that the effective and representative display of 10% of a museum's holdings should suffice for museological purposes, otherwise the presentation may turn out to be too crowded and cumbersome and repetitively monotonous.

A question may now arise as to why then acquire the other 90%. It may be countered that such a large and varied collection is indeed necessary for comprehensive study, research into style and technology, and variety for thematic temporary exhibitions, exchanges with other museums including those of other cultures, loans and for preserving as complete as possible a record of human achievement in any field of activity, or of nature's mystery and largesse in the case of specimens of natural history, especially because the last are far too prone to deterioration and degeneration. The extra specimens are also needed to rotate some items in the interest of their life, and for the relief of monotony and stagnation of communication.

The needs of circulating some items among distant museums for the sharing of visual and aesthetic delight along with information with a larger area of the country or even the world, and of education in general would also justify the continuous expansion of the collection. The needs of the future and of newer museums, all in the interest of education, research and national integration have also to be provided for.

It is very important to ensure that the storage areas should be easily accessible from the workrooms of the curators and galleries, as otherwise they are apt to be neglected. Some of the larger museums which are being built in modern times are planning their stores in the underground basement. It may be a good arrangement in so far as the security of the objects is concerned, but it is difficult to keep the basements filled with fresh air. Working under stuffy conditions may be disastrous for the health of those who have to spend long hours in the basement. Unless constructed well, the basement may have a larger share of moisture than is desirable for the objects themselves through seepage.

Sometimes the air-conditioning plant is also located in the basement. As the maintenance of the plant as well as the electrical installations in day-to-day working order has to be looked after by non-museological technical staff, there is an element of risk to the security of the objects stored owing to the presence of outsiders in the innermost precincts of the museum. Under such circumstances the entry and exit of all authorized persons have to be carefully controlled and monitored.

The storage areas of some of the western museums seen by the author, say, the Museum of Indian Art in West Berlin, present a picture of order and cleanliness. In spite of the unavoidably crowded nature of stored items, an ideal condition of storage, as obtained in these museums, may or must conduce to the long life of the museum objects and would thus be a major step towards the conservation of museum objects in general. Proper storage is, therefore, an essential factor for proper conservation of objects of cultural property.

6

The Legal Aspects of Conservation of Cultural Property

A. Introduction

Every country has a wide variety of cultural heritage handed down to it from the past. The cultural heritage encompasses different categories of architecture such as houses, palaces, forts, temples, monasteries, churches, mosques, tombs, tanks, gateways, towers, sculpture in diverse media of material such as stone, terracotta, wood and metals, paintings on silk, wood, cotton, paper and palm leaf or on the walls of structures, coins, and an infinite variety of objects produced by the hand of man. All these stand as eloquent testimonies of the lives of the past, and have their value in the assessment of the technological and artistic and religious or ideological concepts and achievements of the past. Owing to the passage and ravages of time they are often not in a good state of preservation, and claim in their desolate and sometimes in decaying condition the healing touch and affectionate care of posterity, as otherwise they are foredoomed to wither, disintegrate and disappear. It is, therefore, the duty of posterity to preserve these remains as best as they can, though it may often be a losing battle between the inexorable forces of destruction and the ingenuity of man. It is invariably also an expansive proposition. The responsibility for the preservation of the past is therefore a collective responsibility such as states or governments alone can discharge satisfactorily.

One of the oldest instance of the preservation and maintenance of monuments on the Indian sub-continent was the repairs and enlargement of the *stupa* of a previous Buddha Konakamuni at Niglihawa in Nepal by the orders of king Asoka in the fourteenth year of his coronation as recorded in an inscribed record on a stone pillar on the spot.

Asoka is also credited by Yuan Chwang with the tradition of intensifying the process of the ancient relics of Buddha by the erection of 84,000 *stupas* all over his vast empire by opening up and removing portions of the relics of the Buddha from seven of the 8 *stūpas* originally built over the corporeal relics of the Buddha. This again was in the tradition of preservation of Buddha's relics by Governmental decree and financial support.

About a century after Asoka we find another king Kharavela, king of Kalinga (Orissa) undertaking a series of repairs to a number of existing structures that had been damaged the ravages of weather and time.

We have perhaps the best evidence of conservation of ancient monuments in the continued tradition of the preservation of the bund of a lake called the Sudarsana lake in Junagadh, which was first built during the reign of Asoka by the Governor of the State who was obviously of non-Indian extraction. After it had served its purpose well for well over three hundred years, the mounting pressure of a severe storm on the impounded waters broke the walls asunder and caused leakage of the waters which were meant as much for irrigation as for life in general. It was, therefore, repaired at the expense of the government during the rule of the Saka Satrap Rudradaman in the middle of the second century A.D., i.e., about A.D. 150. The lake continued to serve its purpose well for another three hundred years before it needed fresh repairs again at the expense of the governmental exchequer during the reign of the Gupta king Skandagupta in A.D. 457. The consideration for these repairs were not any theoretical sanctity of an ancient monument but the sheer factor of utility of the lake for irrigating a large area of arable land. The *Mahābhārata* contains an admonition of king Yudhisthira by the great grandfather, Bhishma, for the careful protection of all endowments of land for the preservation of religious establishment. This injunction points to the duties of the king towards the preservation of the relics of heritage. In addition to the kings sometimes rich businessmen, motivated by the desire for spiritual welfare of the donors. Their parents and children, or other relations also carried out repairs to ancient structures, mostly of religious import. The purpose was essentially functional. Such works of public utility were collectively called in later records as *pūrtta-karma*. But the word used for repairs was *jīrṇoddhāra* or restoration of worn out structures. The idea of preserving the heritage in its unchanged or pristine form had not however, emerged. There was no feeling for the sanctity of the old form. Two instances would suffice to illustrate the point. The great temple of Brihadisvara at Tanjore in Tamilnadu was built by Rajaraja Chola in A.D. 1006. The walls of the circumambulation passage around the *garbha-griha* were decorated with several narrative paintings showing among others the themes of dancing figures, the king in the presence of his preceptor, Karuvur, Siva as Tripurantaka etc. But as time passed, the ownership of the temple passed in the 16th century to the Nayakas. The then rulers had a fresh layer of paintings in the somewhat degenerate tempera style of the later period laid over the exquisite Frescos in paintings of the earlier period. There was thus not much sanctity felt or respect or even appreciation of the richer heritage of the past. This temple is well preserved and is still under worship. The inferior technique of the later painters which employed the tempera style was responsible for the peeling off of the upper layer in patches during a lightning stroke on the temple. The fallen patches revealed the underlying layer of paintings to view.

Similarly, the temple of Pashupatinath, the most well known shrine of Siva at Kathmandu in Nepal have undergone many vicissitudes of fortune and witnessed successive repairs including total replacement of its wood-work and roof through the centuries though it has continued to use from as far back as the 6th century A.D., if not from a still earlier date.

Instances need not be multiplied. But enough has been said to indicate that while there was a functional-cum-religious motivation for repairs and renovation, there was not any reverence for the preservation of the pristine forms.

Then in the beginning of the thirteenth century, as a result of the inexorable force of the process of history, many of the ancient structures on Indian Soil were destroyed, burnt or razed to the ground, and new forms of architecture, painting on decorative arts were introduced. In the beginning there were distinct marks of a hybridisation of styles as a result of the inter-mixture between the indigenous and exotic ideas. As time passed the forms changed, and new styles evolved, and architecture encompassed forts mosques, *serais*, tombs, towers, gateways and so on. These were again as much prone to decay and degeneration as any other. But long afterwards emerged an enlightened ruler who took upon himself as state duty the repairs and restoration of ancient monuments. He was Firuz Shah Tughluq (1351-1380) who introduced the use of brick jelly concrete in lime for strengthening structures. The broad stepped viewers' galleries around Surajkund beyond Tughluqabad in Delhi were the creation of Firuz Shah Tughluq.

B. Modern times and Historical Perspective

The British came upon the Indian scene in 1639, when they introduced their own style of architecture. The Fort St. George in Madras is one of the earliest buildings erected by the newcomers. But it was not until 1757, that the East India Company set its feet firmly into Indian soil as rulers. From 1757 to 1818 was a period of growth of the British empire in India. This position was further consolidated between in 1818 and 1848, when the British empire in India became the British empire of India.

It was during this period that the British ruling class developed an interest in the knowledge of India's cultural heritage. It was on the 15th of January in 1784, i.e., more than 203 years ago, owing largely to the interest of Warren Hastings, the Governor General, that the Royal Asiatic Society of Bengal was set up in Calcutta for the purpose of the study, cultivation and preservation of the history and culture of the Indian people, extending its interest to the fields of flora and fauna, geology and minerals, arts and crafts and science and literature not out of any esoteric love for knowledge but primarily for a better orientation of the new exotic administrators of the land. Incidentally, however, and naturally such pursuits generated a thirst for deeper knowledge of the subjects among the newcomers to oriental lands. The Society also started collecting material remains for preservation. In 1814 a Museum was set up at Calcutta to house these collections. It was called the Oriental Museum; and it is the oldest Museum in India. Till now, however, no legal action was adopted for either the preservation of our cultural heritage or against their deliberate destruction.

It was, however, in 1861 that Major General Sir Alexander Cunningham was appointed Director General of the Archaeological Survey of Northern India. With this appointment began a regular survey of ancient remains of architecture, sculpture, paintings, inscriptions and coins for a systematic documentation of the extant remains. Though preservation or conservation was not necessarily its task, conservation of important relics at the expense of the Government began, and in course of time all other parts of India came under the purview of such surveys, and by 1886 all the parts were integrated under one administrative control, namely, of the integrated Archaeological Survey of India.

One of the earliest legal steps taken to prevent the destruction of any monument or public edifice was the *Bengal Regulation XIX* of 1810, which gave the Governor General powers to intervene whenever a public building was likely to be misused. In intent it was a preventive act and was seldom invoked, but it did not imply any positive action for the preservation of ancient relics. But in 1863 Government passed an *Act* which invested the Government with authority "to prevent injury to and preserve buildings remarkable for their historical or architectural value". Howsoever limited in scope, this Act established for the first time Government's interest in the preservation of the cultural heritage of the Indian subcontinent.

While as a result of these efforts some results had been achieved and some documentation, howsoever inadequate, had indeed been prepared, it was not till 1867 that it was recognised in principle, at least, that it was the Government's duty "not only to conserve all historical monuments that had been located but to encourage the exploration of others yet to be discovered". Meanwhile as early as 1870 a thought emerged "*that the antiquities were instructive only when preserved in their original context*", and that it was the bounden duty of the Government to prevent its own servants from wantonly accelerating the decay of monuments.

In 1873 the Central Government issued a circular to the Provincial Governments enjoining upon them "the duty of caring for the preservation of all buildings and monuments of historical and architectural interest".

The next great step in this direction was taken by the passing of the *Indian Treasure Troves Act* in 1878 with the idea of authorising the Government to acquire any work of art that exceeds Rs. 10 in value. The idea was that quite a large number of antiquities are likely to be found buried in earth. In the absence of any legal provision it was possible for any one finding objects of value while digging into the earth for a drain, a well or the foundations of a structure or even a pit, and to claim them for themselves and even destroy them at will. This Act makes it obligatory for the finder of any such treasure to report the matter to the Government. Government then takes steps to establish the ownership and if found ownerless the treasure is given back to the finder, provided Government does not find the objects worthy of acquisition. In the event of such ownerless objects being found to be worthwhile acquiring Government pays to the finder the face value of the object plus a fifth as its price. In the event of the object being more than one hundred years old, the property automatically belongs to Government.

While this Act has been generally helpful it is not free from defects. There is no fool-proof method of ensuring the reporting of such discoveries. The value of Rs. 10/- fixed as the minimum limit is thoroughly out of date and out of keeping with the price indexes in general and of antiques in particular and leaves an element of subjectivity to the finder in the matter of his discretion to arrive at a decision to report the matter to the police, or the local revenue authorities. The period fixed for the closure of all such cases should be reduced. The penalty for not reporting the matter to the Government authorities, namely, one year is too inadequate to be deterrent. As the Act gives considerable leeway to the District Collector, any incorrect decision by the latter might lead to complications. The find of the superlative figure of Nataraja buried in a field at Sivapuram in District Thanjavur in 1952, in a group of six bronzes of the Chola period, was found to be ownerless and, being more than 100 years old, they belonged lawfully to Government. The District Collector, however, instead of conceding the request of the Madras Government Museum to preserve them in the Museum on behalf of the Government, made them over to the Trustees of the Sivagurunathaswamy temple at Sivapuram for the purpose of installation and worship even though all these were utsava-vigrahas, meant for religious use on festive occasions. All these sculptures of inestimable value were afterwards stolen from the comparatively insecure precincts of the temple, apparently not without the connivance of the temple authorities, and replaced by replicas, and the originals smuggled out of the country.

However, as a positive step towards caring for ancient and historical monuments as a Central or national responsibility was taken by Lord Lytton as Governor General in 1879, when the Central Government came forward with a proposal to sanction grants to Local Governments for the preservation of ancient monuments. It was, however, a short-lived measure, for it remained effective only for two years, from 1881 to 1883.

However Government of India enunciated a principle for the conservation of monuments on the basis of a classification of monuments according to their importance and condition of preservation, i.e. those requiring to be permanently preserved, or those requiring minor repairs, or those which were beyond repairs. But the testing of the existing monuments by these yard-sticks made only fitful progress, and it was not until 1898 that a formal scheme was drawn up for organizing the Archaeological Survey of India into 5 circles for the specific purpose of conservation of existing and known materials, but even so no clear-cut policy nor centralized direction in this field was as yet forthcoming.

The chaotic condition was thus described by Lord Curzon, the new Governor General, in 1898 in the following words :

"Thus it has come about that owing to the absence of any central and duly qualified advising authority, not merely are beautiful and famous buildings crumbling to decay; but there is neither principle nor unity in conservation or repair".

He synthesised his thoughts on the subject of the Central Government's role in the field in the following words in a speech delivered before the Asiatic Society of Bengal in 1900. "It is, in my judgement, equally our duty to dig and discover, to classify, reproduce and describe, to copy and decipher and to cherish and conserve". His plans, therefore, for revitalizing the Archaeological Survey of India were accepted by the British Government in 1901 and the reinforced Survey was charged with the duty of conserving the monuments of the country as the most important function. Sir John Marshall was appointed as the new Director General of the reconstituted Archaeological Survey of India and he assumed charge of his office on the 22nd February 1902. After establishing his firm grip on the archaeological problems of the country within a short time, he enunciated the following principles of conservation :

(a) hypothetical restorations were unwarranted, unless they were essential to the stability of the building; (h) every original member of a building should be preserved intact, and demolition and reconstruction should be undertaken only if the structure could not be otherwise maintained, (c) restoration of carved stone, carved wood or plaster moulding should be undertaken only if the artisans were able to attain the excellence of the old; and (d) in no case should mythological or other scenes be recarved." These form the basic principles of conservation of monuments followed in India till today, and restoration or reconstruction, also called renovation, is positively discouraged. These principles have been described in detail and almost codified in a handy volume by Sir John Marshall, and it is called the *Conservation Manual* published in 1922.

C. Ancient Monuments and their Protection

The proposed undertaking of conservation of ancient monuments necessitated some legal provisions as to the definition of monuments and the assumption of legal powers for the same. This led to the passing of the *Ancient Monuments Preservation Act* (VII) in 1904, "to provide for the preservation of ancient monuments, for the exercise of control over traffic in antiquities and over excavation in certain places and for the protection and acquisition in certain cases of ancient monuments and of objects of archaeological, historical or artistic interest".

This responsibility for the preservation of ancient monuments and antiquities were assumed entirely by the Central Government.

The preservation was naturally to be undertaken of monuments declared to be "protected" under the provisions of the Act. The Act defines ancient monuments as follows :

(i) "any structure, erection or monument, or any cave, rock sculpture, inscription or monolith, which is of historical, archaeological or artistic interest or any remains thereof", and including

(a) the site of an ancient monument;

(b) such portion of land adjoining the site of an ancient monument as may be required for fencing or covering in or otherwise preserving such monument; and

(c) the means of access to and convenient inspection of an ancient monument.

The 'antiquities' are defined as follows :

"any moveable objects which the Government, by reason of their historical or archaeological associations, may think it necessary to protect against injury, removal or dispersal".

The monuments which were considered fit for preservation under the Act had to be declared as protected under the Act by a 'notification'.

The Act gave the Government power to compulsorily purchase a monument, provided it was not partially or wholly under religious use. Even monuments in religious use could be protected on the basis of an agreement with the owners.

'Antiquities', being detached from structures, could not be protected, but their movements from any place could be prohibited by notification and they could even be compulsorily purchased.

The Act's provisions regarding the control of traffic in antiquities were not, however, practical. For this purpose Government had to specify any antiquity or class of antiquities which would be prohibited from being exported from or imported into British India by a notification in the gazette. Such action presupposed a thorough groundwork in regard to the antiquities, which alas was a slow and long drawn out as well a cumbrous process, and was obviously different to implement in practice. Nevertheless, the necessity of saving the antiquities from being unauthorisedly exported or imported had been recognised as early as 1904. But the penalty provided for any violation of this part of the Act was a fine of Rs. 5000/- which was too low even from the standards of the time.

It is interesting to note the provisions of penalty for vandalism or theft of parts of monuments which were as follows :

"Any person other than the owner who destroys, removes, injures, alters, defaces or imperils a protected monument, and any owner who destroys, removes, injures, alters, defaces or imperils a monument maintained under this Act, . . . shall be punishable with fine which may extend to five thousand rupees, or with imprisonment which may extend to three months, or with both." In practical terms it is very difficult indeed to prove the commission of such offences and there are very few cases on record of any offender being brought to book under the concerned provisions of the Act. It is one of the commonest experiences to find names of visitors engraved on the bodies of the monuments or detachable pieces like inlay pieces removed from the monuments. The situation calls for more practical steps and at the same time inculcation of a sense of awareness of the cultural values of our heritage and the need to keep them safe and intact among the school children, so that as they grow up into adults they may carry their impressions of childhood through life with sympathy and understanding.

On the 15th August 1947, India became an independent nation. The constitution worked out by the constitution makers in their wisdom made archaeology a concurrent subject between the Central Government and the State Governments within the federal structure of Indian administration. The centre, however, reserved to itself the right and responsibility to protect and maintain archaeological sites and monuments of national importance, leaving the rest, of local or regional importance to the State Governments. The matter of setting up of museums was made the concern of the State Government, though the Central Government were not prevented from setting up any museum for the display and preservation of any aspect of the nation's cultural or natural heritage.

In regard to the declaration of monuments as of national importance a new Act called the *Ancient and Historical Monuments and Archaeological Sites and Remains (Declaration of National Importance) Act*, was passed in 1951 by which the monuments of national importance, declared as such by the Parliament, were specifically listed, because the erstwhile *native states*, which had not been included within the territorial limits of British India, were now included within Independent India and the monuments of national importance situated within these areas had also to be specifically declared as such.

Very soon, however, it was found that the criterion for declaring a monument protected was not clearly laid down in the old Act of 1904, which was still in force. It was found generally defective in many respects. With a view to removing these defects a new Act was passed in 1958 and it was called the *Ancient Monuments and Archaeological Sites and Remains Act* of 1958.

The definition of 'monument' was modified so as to include the criterion of the age of one hundred years as a qualifying clause for monuments and to encompass the remains of an ancient monument as well.

The definition of antiquities too was modified to specify them in clear-cut terms as follows :

(i) "any coin, sculpture, manuscript, epigraph, or other work of art or craftsmanship,

(ii) any article, object or thing detached from a building or cave,

(iii) any article, object or thing illustrative of science, art, crafts, literature, religion, customs, morals or politics in bygone ages;

(iv) any article object or thing of historical interest, and

(v) any article, object or thing declared by the Central Government by notification in the official gazette, to be an antiquity for the purposes of this Act *which has been in existence for not less than one hundred years*". This definition was the same as in the *Antiquities (Export Control) Act* of 1947.

D. Antiquities Acts

The offences relating to destruction, removal, injury, alteration, defacement, imperilment or misuse of a protected monument or removal from any protected monument any sculpture, carving, image, bas-relief, inscription or other like objects were made cognizable offences. The absence of provisions relating to the prohibition of export of antiquities in the Act of 1904, having since been remedied somewhat by the Antiquities (Export Control) Act of 1947, the relevant provisions relating to the control of traffic in antiquities were deleted from the new Act of 1958.

As the provisions of the *Ancient Monuments Preservation Act* of 1904 did not provide adequate security against the export of 'antiquities' to foreign countries it was felt necessary to remedy the situation. It may be noticed in retrospect that it was Duke of Argyll, as Secretary of State for India, who had felt as early as 1870, "that the antiquities were instructive only when preserved in their original context", a point which has been mentioned earlier. It was, however, James Burgess, the second Director General of the Archaeological Survey of India who was the first man to devote himself strenuously to the task of ridding India of robbers and art collection touts masquerading as antiquarians. In 1886 he succeeded in inducing the Government to issue two directives, one debarring public officers from disposing of, without official approval, antiquities found or acquired by them. . ." Sir John Marshall during his entire period of Director Generalship of the Survey till 1928 generally implemented this principle and tried his best to prevent acts to tear antiquities apart from their context. But owing to the increasing appreciation of Indian art by western scholars quite a large number of objects of Indian antiquity were being systematically smuggled out of the country long before India attained Independence. With a view to preventing this deplorable phenomenon from posing a threat to the safety of India's cultural heritage the Government of India passed an Act, called the *Antiquities (Export Control) Act*, in April 1947.

Apart from defining "antiquities" in clear-cut terms it provided that no antiquity could be exported without a valid export licence to be issued by the Government. Offences under the Act were rendered non-cognisable, and the punishment provided was made very nominal, as it was confined to one month's imprisonment at the maximum or a fine which might extend to Rs. 5,000, apart from the confiscation of the object under the provisions of the *Sea Customs Act* of 1878.

It was soon found out by the dealers that the margin of profit in the unlawful traffic of antiquities was so much that any risk was well worth taking as the punishment was rather meagre.

Very soon after the introduction of the Act the country became independent and it threw open its doors to foreigners from all over the world. Many of them got acquainted for the first time with hitherto unknown or inadequately known art forms. It was a time when Indian art was already being much better appreciated by the western world than ever before, owing to the persuasive efforts of a few western scholars. Some saw in them a tremendous source of profit in the western world. Collection and smuggling of Indian art objects increased by leaps and bounds, for many of the collectors were not inspired or impressed by the logic of the necessity to preserve works of art *in situ*, or the sanctity of their retention in the country of origin. Some of the affluent countries were able to pay handsome amounts for the possession of antiquities from India. The situation grew worse in the sixties when large-scale thefts of sculptures, paintings and coins were reported from monuments, museums and private possessions. Such a state of affairs was paradoxically a serious blow as much to national prestige as to the cause of retaining the heritage within the bounds of the country. It was, therefore, felt that a more stringent measure should be adopted to prevent the smuggling of antiquities and all categories of objects of cultural property. The result of the Government's efforts in this direction was the passing of the *Antiquities and Art Treasures Act*, 1972, "to regulate export trade in antiquities and art treasures, to provide for preservation in public places and to provide for the registration of specified categories of antiquities in the possession of private individuals and institutions other than educational or cultural institutions owned, controlled or managed by Government and for the licensing of dealers for the purpose of internal traffic in antiquities and also to provide more stringent punishment for the infringement of the provisions of the Act."

The new Act is certainly an improvement upon all existing legislation on the subject. It also includes 'manuscripts', which are more 75 years old in the category of antiquities, while the general criterion for all other categories is 100 years. It also provides for the declaration of any category of works of art which may not qualify for being classed under antiquities in terms of age, as national "art treasures", provided of course the authors of such works of art are not alive so as not to deprive the living artists of their legitimate right to making a living out of their work. Though the *Ancient Monuments Preservation Act* already has a provision for compulsory acquisition, the procedure for such acquisition in the new Act has been well defined and adequate safeguards have also been provided for the payment of proper compensation through the mediation of arbitrators of the rank of High Court Judges.

While measures have been adopted to render smuggling more difficult than even before, a step has been taken for the compulsory 'registration' of antiquities in the country, enabling the preparation of a national data bank of documentation of Indian antiquities.

This would not merely enable a fuller appreciation of the art heritage of the country, it would also make it possible to work out a detailed plan for the proper preservation of the nation's cultural heritage on the basis of their actual state of preservation.

The stricter vigilance by the concerned agencies of the Government to prevent thefts and smuggling of antiquities now exercised in concert by the Police, the *Customs Department* and the Archaeological Survey of India, the State Department of Archaeology and Museums, and the Museums at all levels and the more stringent penal measures for violation of the law would help keep the cultural heritage within the bounds of the country. Such action would also help in tracing them quickly in the event of theft and to claim them back from any foreign country in the event of smuggling on the basis of the documented evidence that would be now obligatorily available as a direct result of the new Act.

Legal measures for the preservation of cultural heritage have been adopted on international levels as well.

E. UNESCO Convention on the Prevention of Smuggling

As far back as 1970 the UNESCO passed a *Convention for Prohibiting and Preventing Illicit Import, Export and Transfer of Ownership of Cultural Property*. Among other things it has defined cultural property in much broader terms than the *Antiquities and Art Treasures Act*, 1972 has done. It would be proper in this context to offer the full repertoire of cultural property as defined in the Convention as follows :

"For the purposes of the Convention, the term 'cultural property' means property which, on religious or secular grounds, is specifically designated by each State as being of importance for archaeology, pre-history, history, literature, art or science and which belongs to the following categories :

(a) rare collections and specimens of fauna, flora, minerals, anatomy and objects of palaeontological interest;
(b) property relating to history, including the history of science and technology and military and social history to the life of national leaders, thinkers, scientists and artists and to events of national importance;
(c) products of archaeological excavations (including regular and clandestine) or of archaeological discoveries;
(d) elements of artistic or historical monuments or archaeological sites which, have been dismembered;
(e) antiquities more than one hundred years old, such as inscriptions, coins and engraved seals;
(f) objects of ethnological interest;
(g) property of artistic intrest, such as :

    (i) pictures, paintings and drawings produced entirely by hand on any support and in any material (excluding industrial designs and manufactured articles decorated by hand);
    (ii) original works of statutory art and sculpture in any material;
    (iii) original engravings, prints and lithographs;
    (iv) original artistic assemblages and montages in any material;

(h) rare manuscripts and incunabula, old books, documents and publications of special interest (historical, artistic, scientific, literary, etc.) singly or in collections;
(i) postage, revenue and similar stamps singly or in collections;
(j) archives including sound photographic and cinematographic archives;
(k) articles of furniture more than one hundred years old and old musical instruments.

The Convention recognises the importance of international co-operation in prohibiting and preventing the illicit export or import of 'cultural property' as defined in the Convention. This presupposes a definition at national level of the cultural property of all categories and also of adoption at national level of legislative measures to prevent the illicit export and import of cultural property and also the creation of enforcing authorities for giving effect to the basic idea of the Convention.

In so far as prevention of illicit import is concerned it enjoins upon the States parties to adopt measures to prevent the entry of any category of cultural property from a foreign country unless it is accompanied by a certificate of authorization of export from the country of origin and also for the museums of the countries to adopt a firm principle and practice of refusing to accept any object which is not accompanied by an authorisation certificate or without verification of its antecedents, as a basic ethics of acquisition. Though the basic ethics of museum men all over the world is to throw the principles to the winds and augment the collections regardless of considerations for their antecedents, barring notable exceptions, it is to be hoped that the attitude will soon change. The needs of better understanding among the members of the international community will serve as a deterrent and as the producer of a new conscience and respect for the rights of the different nations.

As regards restoration of objects of cultural property which are not legally exported, the countries of origin, can claim back their objects under the Convention provided they can establish their right with the help of documented evidence and are prepared to pay *adequate compensation* to the *innocent* purchaser in the foreign country. From this point of view, the categorization of cultural property, completion of their documentation in all respects and provision of adequate finances for payment of compensation for stolen and smuggled objects of cultural property are pre-requisities. It is also to be emphasized that all these claims are to be settled through the diplomatic channels. If the museums refuse to buy objects without verifying the antecedents and legality of the deals, a good deal of the illicit traffic will be reduced.

It may be observed that the 'cultural property' as defined in the Convention covers all categories of objects and all possible kinds of museums and institutions such as museums of Art, Archaeology, Ethnology, Science and Technology, Manuscripts Philately, Personalia, Medical and Veterinary Sciences and even libraries. But in India there is no legal measure so far other than the *Antiquities and Art Treasures Act*, 1972 and the *Wild Life Protection Act*, 1972 and they cover antiquities as defined in the Act, and specified categories of wild life which are threatened with extinction as a result of thoughtless destruction for profit. But the problem in respect of all the different categories of cultural property is not as acute as in the case of art and ethnological objects and specimens of wild life. The two Acts mentioned above take care of the relevant categories of materials, except of course the ethnological objects, as the objects of the other two categories concerned are presently most vulnerable to exploitation. The high demand for ivory, tiger and leopard skins, snake and crocodile leather, and rhino horns are threatening some of the species with extinction which if unchecked and unregulated would be an intrinsic loss and would also disturb the ecological balance very badly with all the evils and inevitable repercussions on human society.

The problem of restitution of cultural property has been complicated by the more recent resolution by some of the developing countries on a UNESCO *Recommendation for the Restoration of Cultural Property* taken away by force as a result of conquest or during war or under colonial regime. While there is indeed some justification for the demand for restoration of such categories of cultural property, the problem has been anticipated somewhat, though not fully, by suitable provisions in the 1970 Convention itself. Article 4 of the Convention provides for the recognition of the following categories of cultural property in this context as beyond the pale of restoration under the Convention under consideration :

(a) cultural property created by the individual or collective genius of nationals of the State concerned, created within the territory of the State by foreign nationals or stateless persons resident within such territory;
(b) cultural property found within the national territory;
(c) cultural property acquired by archaeological, ethnological or national science missions with the consent of the competent authorities of the country of origin of such property;
(d) cultural property which has been the subject of a freely agreed exchange; and
(e) cultural property received as a gift or purchased legally with the consent of the competent authorities of the country of origin of such property.

Meanwhile as early as 1974, a resolution has been adopted by the UNESCO for a *Recommendation for an International Exchange of Cultural Objects* with a view to promoting international understanding and bringing the nations culturally closer to where they really belong, as will be elaborated later. The Nineteenth Session of the General Conference of the UNESCO held in Nairobi in August 1976 has adopted a draft *Recommendation for the International Exchange of Cultural Property.* It has recommended that "bearing in mind that all cultural property forms part of the common cultural heritage of mankind, and that every state has a responsibility in this respect, not only towards its own nationals but also towards the international community as a whole, member states should adopt measures for international exchange, in the form of loans, deposits, sale or donation of cultural property under agreed conditions between the different countries, considering that a systematic exchange of antiquities or cultural property among cultural institutions would result in exchange of their surplus items in return for objects which they lacked, and would be enriching to all parties and would also lead to a better use of the international community's heritage which is the sum of all the national heritages.

Over and above these there is scope for bilateral agreements between nations for the restitution or exchange of cultural objects to promote and improve bilateral relations and understanding of each other's history and cultural lives. India has already ratified the Convention on the "Means of Prohibiting and Preventing Illicit Import, Export and Transfer of Ownership of Cultural Property, 1972", and would, therefore, a legal beneficiary of the provisions of the Convention under International law, but only in respect of those countries which have also ratified the Convention in full.

F. Conclusion

Though each nation or group of people may have a cultural pattern of its own, and may be legitimately proud of its cultural heritage, it may be underscored that the heritage belongs as a matter of fact and in the fitness of things to the whole world. This is as much because of considerations for the growing inter-dependence and need of co-operation among nations in all walks of life as for the consideration that the cultural heritage of each country, regardless of its possible evolutionary bias, has a large element of diffusion to be traced to one or more sources. Considered from this point of view it is the responsibility of all countries to co-operate in the preservation of the corporate cultural heritages which represent so much of our past, though the countries of origin themselves may be in different stages of development. Strictly speaking, it is indeed the proud and primary responsibility of the nation which has built up its cultural heritage to preserve it within the bounds of its territories as a matter of birth-right. It is, therefore, but proper that it defines its cultural heritage under its own law, and also makes legal and financial as well as functional provisions for the safeguarding of the cultural heritage against the forces of natural decay, vandalism and theft, and illegal export, respectively. Regardless of one's own laws, one country must also respect the national laws of the States Parties to the Convention in regard to prevention of smuggling and restitution of smuggled objects. But it may not always be possible for the smaller and developing nations to command either the resources or the knowhow of preservation or to employ their own machinery effectively for their safeguard against vandalism, theft and smuggling. The responsibility for the safeguarding of each other's cultural heritage devolves in the larger sense upon all the world. The UNESCO has in fact provided such an instrument for the safeguard of the cultural heritage throughout the world through its twin organisations called the *International Commission of Monuments and Sites* and the *International Council of Museums*, respectively. These two forums provide the member-nations with opportunities for discussion of the problems for seeking the advice of experts and even for seeking international help for the preservation of their cultural heritage, including the ancient environments and landscapes, even during armed conflicts. These are of course non-governmental bodies affiliated to the UNESCO which is an international organisation set up with international co-operation under the overall control of the United Nations. In addition the UNESCO has also set up in Rome an important centre for training in the conservation of cultural property as well as for expert advice and consultations for the purpose.

Thus it can be seen that a reconciliation between the national laws on conservation and security of cultural heritage on the one hand with the International Conventions under the UNESCO and with the help of non-official bodies of ICOMOS and ICOM under its control on the other that the cultural heritage of any nation, and, in a broader sense, of the world for that matter, can be properly preserved for posterity.

In this context it may be worthwhile considering that there is as yet no law against any private individuals possessing an antiquity or an object of cultural property as long as it is legally acquired. In the ultimate analysis it is questionable if they have indeed a right to possess such objects. This is so because the very fact of possession, regardless of the means by which one comes into possession of an antiquity or object of cultural property, carries with the obligatory duty to preserve them under the internationally accepted concept that the cultural heritage belongs not merely to the nation but the entire international community. A question may, therefore, be legitimately asked if it is possible for an individual howsoever, rich to undertake the scientific preservation of cultural heritage, particularly in the context of the task being of complicated nature and being so sophisticated under the latest scientific methods or to provide proper security to them. The answer clearly in respect of most cases would be an emphatic 'no'. But it may be countered limitedly by stating that they may get their objects properly treated from time to time for a payment. But the existing institutions of conservation in our country are not sufficient in scope and capacity to cope with the enormity of their normal institutional tasks, not to speak of their capacity for undertaking private work, except at the cost of public work, or even to ensure the security or resist the temptation to switch them for fakes or replicas. For private collectors provision of security to their possessions poses a grave problem.

The extension of the concept of the international community's right to the cultural heritage as a whole infringes upon the right of private possession, as the public in general do not normally have the right of access to the private boudoirs or drawing rooms of the private owners where these objects are usually kept and sometimes zealously displayed as proud private possessions and as a mark of their taste. But they may not be inclined nor are they under any obligation to show them even to scholars, let alone all and sundry. Nor is it possible for the private individual to provide these priceless objects the measure of security they need, nor the ideal conditions of temperature and humidity so badly needed for their proper preservation and prolongation of their lives.

The anomalies of the situation calls for fresh thoughts and even legal measures in the larger interest of the community as a whole and the world at large, and even in the interest of the personal safety of the private owner. The situation, however, merits consideration at both national and international levels in the context of what has been stated earlier.

One other aspect that deserves deep consideration is the factor of providing safeguards to objects of cultural property when they are moved from one museum to another within the counrry or from one country to another for purposes of exhibition for dissemination of knowledge about one another, or for national or international integration through national or international measures of law, as the case may be. The UNESCO has under its consideration a *Recommendation* for the coverage of risks to movable cultural property.

Though for perfect security it is necessary to prepare a complete inventory of the different categories of cultural property on the national level and under national law, this basic task is obviously one of enormous dimension and of expense. Theoretically it may be possible to undertake this task but its completion would be time-consuming. Documentation of cultural property covering all aspects of material, size, weight, description, X-ray records, and records of composition obtained through chemical methods or through neutron activation analysis in all suitable cases, besides style and schools of art findspots or possible source of origin with all other relevant details of chemical preservation done, with descriptive and photographic records of the conditions before and after treatment will be the minimum and ideal desideratum. All this information can gradually or eventually be made over to the documentation centre of the UNESCO, and in required cases may be made use of by the National Crime Bureaus or even by the Interpol for tracing stolen or smuggled objects.

But the major means of ensuring safety can be undertaken through steps taken with the help of law at national level against (i) vandalism, (ii) incendiarism, (iii) theft, and (iv) smuggling.

Insurance would be another means of providing an umbrella of some value to the objects of cultural property. But in the event of real trouble, insurance would be of little use, as it might lead to compensation through money but there can be no replacement of the objects destroyed by vandalism or incendiarism or lost in transit or ruined by accidental destruction of the transport in which they are carried from place to place, or in any other manner. Besides, the value of any object cannot be objectively determined, and in the event of compensation by the return of insurance money, most often it is the owner nation which suffers the loss, particularly, where the insurance business is nationalised. In this context it is questionable if art objects of outstanding value should be subjected to the risks, howsoever, minimal, of transit by land, air or sea.

It is a happy and healthy sign, nevertheless, that there is international consciousness of the importance of the problem and of the need to take concerted action for the coverage of the risks involved.

It is heartening also to note that the UNESCO has under consideration a scheme to intensify the training of specialists at various centres of conservation including the National Research Laboratory for the conservation of cultural property, and open a new centre for the South East Asia region, and is also considering steps at international level for raising the technical level for the preservation and presentation of the cultural and natural heritage. There is no doubt that such steps would receive support at national level through proper legal provisions, and the international steps would also come under the aegis of international law.

Regardless of all the safeguards that laws, national or international may provide, much depends on the human factor at all places.

7

The Role of Museums in Education

A. Introduction

The concept of the museum has now undergone a complete change. From being an exclusive private collection of ancient times it has now become a public institution, regardless of who the owners are or who controls and manages its affairs. It was Julius Caesar who, in the middle of the 1st century B.C., was the first to establish the principle by donating his personal collections to the temples. But it was not until the 18th century when the principle was generally established, though there were plenty of private museums which did not pursue an open door policy of admitting all and sundry into their portals until many years later.

The founding in 1572 in London of the Society of Antiquaries was a landmark in this context. Its avowed purpose was (i) to seek out the truth as opposed to falsehood, (ii) to establish or distinguish tradition from evidence, and (iii) sift history from legend. It was a spirit of enquiry which underlay the setting up of the institution and indicated the contemporary trend in human thought that inspired all his activities. Museums too came under the spell of the spirit. It became accentuated as a result of the Renaissance, and in wake of the Counter-Reformation in Europe.

In Britain where the first museum was set up at Oxford in 1683 the spirit of enquiry had already started functioning, and the benefits of the museum were already available to the public in a sense being part of the university. But it was the British Museum which was founded in A.D. 1759 which threw open the access to all who were studious or curious.

In Italy the Vatican Museum in Rome was thrown open to the public in 1773 by the orders of Pope Clement XIV.

In Spain the Royal Museum of Prado was opened to the public by the orders of Joseph Bonaparte in 1809.

In Germany (long before the Second World War), the role of the museum as a potent public institution for informing and influencing public opinion had been envisaged as early as the 19th century, for the idealists of Germany wanted the next generation of Germans to grow into ideal world citizens, and they believed that the museum was one of the most powerful means of educating and moulding the new type of German man. Hence, the national museum had to be constituted to suit and serve this underlying purpose.

It was Frederick William II who passed orders for the creation of a public museum in 1810. More than a century later Nazi Germany realized the potential power of the museum to shape an anormous population into a national[1] and utilized them accordingly through their politically oriented education programme.

Similarly the Italian museum during the Fascist regime of Bernto Mussolini were oriented to educating the Italian pople in the glories of their past in which by their hope of redeeming the lost glories of the past as an imperial power.

But in the U.S.A. the role of the museum in educating the people in general was appreciated from the very inception of the museum movement in that country. Furthermore the museum were regarded as very potent instruments of social change. In this context it has been clearly stated that the purpose of the museum is "to afford to our people free and ample means for innocent and refined enjoyment and also supplying the best facilities for practical instruction and for the cultivation of pure taste in all matters connected with the arts".[2]

In regard to the educational use of public museum in the U.S.A. it can be stated that "on the whole the European efforts at utilizing museums as means of education appear modest if compared with the vigorous contemporary activities in the United States where education is considered a primary function of the Public Museum from its very beginning".[3]

With the throwing open of public museums to all and sundry the role of the museum as an educator was established. The museum objects, if properly presented, have tremendous capacity through their visual and aesthetic appeal to stir the imagination of the viewers, and stimulate curiosity and promote effort to learn more about them leading to the acquisition of knowledge.

Alma Wittlin says,[4] "If of true aesthetic quality, the image (in a museum or elsewhere) would arrest the attention of indifferent passersby and would arrest the attention of indifferent passersby and would by its appeal to the emotions provoke thoughtfulness even in the less contemplative and stir the imagination of the dull".

In regard to objects relating to the phenomena of natural sciences or science and technology museums bring home to us in visual form the wealth and variety of natural resources, their uses in and bearings on our day-to-day lives, and the importance of the cycle of lives, and the role and importance of ecological balance as the case may be. They provide information, excite curiosity, inspire efforts and promote knowledge in a telling manner.

Museums have, therefore, come to stay as educational institutions *par excellence*, and in fact it is its primary function in the national and international contexts. Its importance in the Indian setting cannot therefore be over-emphasized. All other activities have a supportive role to play. In view of this position they have to be oriented and

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1. Sultz F.T., "Die Natwendigkeit der Umgestaltung Unserer Museen", *Museumskunde*, 1933.
2. Low, T.L., *The Museum as a Social Instrument*, New York, 1942.
3. Ramsay, G.F., *Educational Work in Museums of the United States*, New York, 1938.
4. Alma Wittlin, *The Museum: Its History and its Tasks in Education*, London, p. 73.

manned suitably. Unfortunately, however, the museum profession in India does not attract the kind of personnel who are ideally suited for the work. The reasons are not far to seek and will be dealt with elsewhere. Suffice it to say for the present that the bulk of the 400 odd museums in India are not provided with adequate funds to enable them to equip themselves with all their accoutrements to fulfil their role as educational institutions, nor is there adequacy, not to speak of uniformity, of salary scales to be attractive enough for talented persons.

B. The Educational Role of Museums

Of the many functions of a museum mentioned earlier, the most important is the search for knowledge in its myriad facets, sustenance and furtherance of it and dissemination of the same among the masses.

This enormous function of growing complexity, cannot now be performed by the limited staff of the museum and has, therefore, to be shared by the community as a whole. In the days of old, the temples and all other places of worship were the rallying points of the society and they served as cultural and social institutions. They also served as centres of education. In course of time this role has been considerably diluted, and the museums in recent times have come into their own to serve as educational and social institutions to serve the community. But enough advantage is not being taken by the prevailing education system or the society at large to make adequate use of the facilities and materials available at the museums.

In this area, the Science and Technology Museums under the National Council of Science, Museums are perhaps an exception. With their curricular programmes, visitor-participation displays and open-air museums in the rural areas, the annual science fairs and the mobile van programmes, they have forged ahead and have made real progress in the educational field. At the moment, however, their outreach is still limited, for they are located at the far-flung urban centres like Calcutta, Bangalore, Bombay and Patna. While those at Calcutta and Bangalore have been fully established, those at Bombay and Patna are in their primary stages. It is heartening to know that yet another Science Museum has been set up at Hyderabad under the State Government.

The National Museum of Natural History, New Delhi, is also education-oriented and its "Discovery Room" is at once a thrill, a challenge, a source of amusement, a means of education and a fountain head of fun for the child and the eternal child in the adult alike. Its programme of a drawing competition dealing with the Natural History held sometime ago was a great success and popular and is an index of further achievements afield.

The Rail Transport Museum in New Delhi serves the purpose to an extent through its attractive displays of the exhibits to remind us all of the progress made by us through the centuries in locomotion, also through a system of visitor participation.

This is not to say that other museums do not have an in-built mechanism for serving as educational institutions. Some museums are indeed fortunate to have a separate Education Department, but most museums do not have it, and have to fend for themselves to make the best use of their limitations to fulfil their basic duties, also in the field of education.

In this context it would be legitimate and germane to consider the views of some makers of the nation on the educational role of museums. The late Sir Asutosh Mukherjee was one of the first Indians to emphasize the educational role of museums in unequivocal terms. Speaking on the occasion of the centenary of the Indian Museum, Calcutta, on the 28th November, 1915, Sir Asutosh said, "I have no desire on the present occasion to enter upon to an exhaustive discussion of the true functions of a museum in relation to the community at large. . . It is now generally recognized that a museum is an institution for the preservation of those objects which best illustrate the phenomena of Nature and the works of Man, for the utilization of these in the increase of knowledge and for the Culture and Entertainment of the people." He went to say that a museum "must be equipped adequately for the fulfilment of three principal functions, viz., first for the accumulation and preservation of specimens such as forms the material basis of knowledge in the Arts and Sciences; secondly, for the elucidation and investigation of specimens so collected; and thirdly, to make suitable arrangements calculated to arouse the interest of the public and to promote their instruction". In regard to the role of the museum as an educational institution he added that the museum should be "an adjunct to the class room and the lecture room; secondly, as a bureau of information; and thirdly as an institution for the culture of the people".

The late Jawaharlal Nehru said on the occasion of the centenary of the Government Museum, Madras, in 1951 : "the whole point of museums, whether they be museums of antiquity or museums of modern life, is that larger and larger number of people should visit them and learn from them. They should not be confined to the visiting Directors of museums from other countries. More and more people should come, learn and, in fact, facilities for learning should be made for, lectures to be given to the ordinary folk who come there for guides to explain to them what these things are and arouse their interest in them, especially school children and college boys and girls. That is the main purpose of museums. I would not very much mind if no adult comes to the museums because his mind is made up and not always capable of learning much but in the formative period of childhood and youth it is essential that people should come to museum and learn. Their mind will be affected by the objects which they see there. I should like this aspect of education through the museum to be developed not by appeals to the public, but by encouraging and inviting people to come, inviting not merely those who would normally come, but also those who would not otherwise come, persuading them to bring their children and explaining things to them, so that they may widen their vision and feel that the world is a bigger thing than they normally believed to be."

Nehru said again on the occasion of the formal inauguration of the National Museum on the 18th December, 1960 : "The museums are not just places to see odd things or *ajayabghars*, as they used to be called. They all should be essential part of the educational system and cultural activities of the country. What is more, they are places for public education. Private houses may have works of art and beauty, but they are not open to the public. It is important that every city possesses a museum and I would add, even villages have their small museums wherever Possible."

C. Need to Build a Larger Number of Children's Museums

Nevertheless, the number of Children's museums in our country is also small. Apart from the Children's Museum at Lucknow, the Bal Bhavan and the International Dolls House at New Delhi, the Childrens' Museum at Amreli, Gujarat, and the Nehru Children's Museum at Calcutta, there are hardly any that are worth mentioning. Some of the larger museums may perhaps organise special exhibitions aimed at the child or mount such exhibitions in their museum-buses and take them round the country and especially to the villages and create enthusiasm among the children. Some time ago Prof. V.K.R.V. Rao had suggested the idea of a museum train to tour the country. This idea can be translated into practice by the major museums of the country as a combined endeavour. As our Education Minister once suggested, we may even devise a scheme to award handsome cash prizes on the best on-the-spot essays on visits to the museums.

D. The Propagation of Culture Scheme and the Museums

In this context it would perhaps be worthwhile to emphasize, even at the risk of its being called a cliche, that if the museums are to fulfil their duties in the long run, they must aim at the grassroot level, for 'it is the early bird that catches the worm'. In the field of arts, crafts, dance, drama, music and literature, an effort has been made to make use of the National Museum to serve as focal point for a scheme launched a few years ago by the Department of Culture in collaboration with the National Council of Educational Research and Training, and the Delhi University for the "Propagation of Culture" among the school and college students. The scheme is based on the principle of "If you wish to educate the children, educate their parents first". The role of the school teacher is pivotal in the education system, for in the early formative years of a child between the ages of 9 and 15, he or she places the most implicit faith in the teacher, who is regarded as infallible. The scheme aims at educating the teacher in the fundamentals of our culture and traditions, and our arts and crafts, so that they, in turn, may transmit their knowledge to their pupils in proper perspective and generate their interest and pride in our past, titillate their spirit of enquiry make better citizens of them and promote national integration at the grassroots level.

The ultimate objective is to cover every secondary school or college or educational institution in India gradually and provide each with a "mini-museum" of 20 plaster cast copies of 'sculptures through the ages', a "mini-library" of a book on *Birds and Animals in Indian Art* and about 10-cyclostyled books of lectures on the different subjects, besides a set of cassettes recorded with 10 hour lecture demonstrations, a set of 500 slides of our art and architecture, a tape-recorder and a projector, respectively. This is only a modest scheme of initiation and has already aroused great curiosity and enthusiasm among the teachers, who have found a new source of joy in life and a meaning for the nobility of their profession. The scheme owes itself entirely to the guiding spirit of Dr. Kapila Vatsyayan, then Joint Educational Adviser in the Department of Culture, who had not merely conceived of the idea, but gave a concrete shape to the programme and has been working untiringly for the improvement of the scheme through changes in response to the demand and needs, having first used the National Museum as focal point.

The cue has been taken by the International Women's Club of Delhi and they have formed a group to orient themselves in the Indian History and Culture under the auspices of the National Museum, almost on similar lines, with a view to acquainting themselves with the Art and Culture of the people in whose midst they have to live a good and memorable part of their lives. This is a great step forward, as similar orientation for all parts of the world would not merely promote knowledge and pleasure but better understanding of far-flung peoples of varying cultures, and eventually this knowledge and understanding would percolate to the children and once again to the grassroots of the wide universe. This only shows what great potentials the museums have in imparting education with a great deal of pleasure and no pain whatsoever to those who receive it.

In the light of the experience gained, it is felt that the similar schemes for the Propagation of Science and Technology or Natural History would be equally popular and would be immensely beneficial to the teachers and school children alike, if not also to the adults.

This system can be made much more effective by the introduction of a visitor participation programme for imparting instructions in the basic principles of Science and Technology and their utility and application to our daily lives as is being very effectively attempted by the Science Museums in our country. This would not merely break the barriers of inhibition or shyness but will also promote a spirit of enquiry and exploration among the juvenile museum visitors and adults alike. However, owing to factors of financial involvement, experiments in this direction can only be attempted limitedly for the time being. Nevertheless, the system should be introduced and given a trial in other spheres than art and culture as well. Some programmes already exist in the Science Museums, and they can be further intensified.

D. Museums and their Contribution to Education and Research

Apart from providing the fundamentals of knowledge in the specific fields, the museums preserve and provide the basic materials of research in practically all the academic disciplines, namely, Archaeology, Arts, History, Dance, Music, Literature, Botany, Zoology, Geology, Mineralogy, Agriculture, Medicine, Physics and Chemistry, Science and Technology, etc. The guardians of the museums in all areas are expected to be almost supermen, for not only do they have to intimate knowledge of the materials and disciplines under their charge, but are being called upon to undertake research of high order so as to be able to earn their position in the first place, and to continue working hard at it in order to be able to retain their position, and also be a ready teacher, being required at short notice or even with regularity, where regular arrangements or demand exist, to open their mouths and speak on the displays to audiences of varying levels of understanding at all times of the day. Their normal duties also include the documentation of the objects, constant efforts to acquire fresh materials or to experiment with fresh methods of displays, arrangements for exhibitions around selected themes, both at home and abroad, and publish their researches for the connosieurs and the common man alike, besides bringing out handbooks, guides, brochures, pamphlets and posters, etc. They are also charged with the responsibility of the security of the objects under their charge against destruction by fire, humidity, excessive heat, variation of light, moulds or by pilferage and several other agents. They have also to carry out much administration work in addition, in their stride, to sustain all their work and yet maintain the bland and attractive facade of the displays as well as of mien and conduct.

E. A plea for the Integration of the Museum into the System of Education

The plea made here is obviously for the integration of the museums into the entire educational system from the school to the university level, by the recognition of the museum as an educational and research institution and by the provision of a mechanism for its proper utilization for the entire purpose of education and research. In a sense the museums are functionally comparable to hospitals in medical institutions. Just as it is unthinkable to instruct anyone in physiology or anatomy or medicine or surgery without the use of the patient in a hospital or skeletons in the cupboard, not to speak of the hapless bodies in the morgue, it would be a truism to insist that no education in any discipline can be completed without a museum in the discipline concerned. This applies particularly to the museology courses run by the universities. By and large many universities do have departmental museums, as teaching aids, but clearly, barring a few exceptions, they are too inadequate and unrepresentative in content and are not entirely satisfactory as museological institutions. These are often not true museums as neither their displays, nor lighting, nor labelling, are as they ought to be in a museum. They are also often not open to the public as a matter of rule. Some universities indeed have full-fledged museums, such as the Asutosh Museum of the Calcutta University, specializing in the folk arts and crafts, or the Bharat Kala Bhavan at Varanasi, specializing in fine arts, or the Archaeological Museums of the Deccan College and the Allahabad University, specializing in archaeology, or the Museum of the Rabindra Bharati University at Calcutta, specializing in contemporary art, etc. Examples can be multiplied. But none of them can be cited as outstanding example of museums with due apologies to them all, even though they may have outstanding collections. The reasons are not far to seek, and, to my mind, the present situation can be set down, to an extent, to inadequacy of support to these institutions, both in terms of manpower and money, and inadequacy to importance attached to the role of the museum in the education system of the universities.

regardless of where the responsibility lies. The situation would arrest our attention and call for rethinking on the matter. If it is realized and recognized that the museums do indeed play a vital role in the entire education system in the country, they have indeed to be integrated into the education system. On the one hand, the school curricula should include visits to the museums and attending museum lectures on specific subjects, and, on the other, museums should be recognized on their merits as educational and research institutions by the universities, and the museum staff should be given the respectability of the university teachers, regardless of whether they are part of the university or not. It would be proper in this context to refer the relevant recommendation that had been made, about a decade ago, by the Moti Chandra Review Committee on Museums, which was appointed by the Government of India in 1969 to work out a National Policy on Museums, specifically in regard to the status of the museum staff *vis-a-vis* the universities.

The Committee had recommended that some of the supervisory and technical posts in the museums at the national level should be equated to comparable posts in the universities as follows :

Keeper/Curator : Professor
Dy. Keeper/Dy. Curator : Reader
Curatorial Associates : Lecturers
Curatorial Assistant : Junior Lecturer

Furthermore, the Committee also expressed the view that the specialized nature of duties performed by the museum personnel actually carried far greater responsibility than those of their counterparts holding comparable posts in the universities.

What applies in the view of the Moti Chandra Committee to the museums at the national level applies with equal force to the more important museums in the country, which are invariably further handicapped by being indequately manned. This is not to concede that the national institutions themselves are adequately manned.

In contrast, it would be worthwhile to mention the staffing pattern of the well known Musem of Indian Art in West Berlin (Stautliches Museum fuer Indische Kunt). It is headed by a Director who enjoys the status of a Senior Professor at the Free University of Berlin, even though museum is a Government institution, and he is assisted by contingent of staff consisting of the following :

(1) Secretaries : Two
(2) Keeper : One
(3) Scientific Asstt. : One
(4) Volunteer : One
(5) Restorers : Two
(6) Technical Asstt. : Two

With all these the total number of objects, including the minutiae of potsherds and beads, is 10,000, and there three Departments to share this number.

The comparatively poor staff position in our museums is well known. Their staff strength is very much smaller in contrast, and they enjoy much lower status and have a much shorter tenure of service than their western counterparts. This major museum in Berlin is comparable in terms of the volume of its materials to only one of the smaller Departments of the National Museum such as the Decorative Arts or the Anthropology, etc., and some Departments have as many objects as this museum, and some six times the number, and there are 10 Departments in all.

F. Need of an Integrated Development of Museums

This brings us to the equally important question of an integrated growth of museums, and the eventual need of setting up museums at villages, schools, towns and districts in close link with the State, Regional or National Museums, as well as the specialized institutional and university museums. The possibility and need of an integrated development of all museums in the same discipline has been outlined in a separate chapter. It would be idle or impractical to think in terms of a monolithic structure of a Museums Service of India to cover and administer museums of all types, but it should indeed be possible to think and act in terms of a dichotomy and interrelationship at once among the museums in each discipline at three levels, namely : (a) National, (b) Regional, and (c) Local, respectively, with a mechanism for co-ordination among them all along the line. The co-ordination is also not envisaged as administrative, but only at the technical and academic levels, and would include co-operation and collaboration in the holding of exhibitions, exchanges of objects, help in display and conservation and implementation of education programme and furtherance of researches by mutual consent, and for the general well being of all.

G. Need of Training and Research in the Conservation of Cultural Property at the Universities

In the rather specialized field of conservation of museum objects, the facilities available in India today are far too little in comparison with the obvious and actual needs. In view of the importance of the subject, some practical thought may be devoted to the undertaking of research and training in the conservation techniques in some of the universities, if only to supplement the efforts that is presently being made by the Government in this direction. While the efforts that has so far been made in the field of conservation is indeed laudable, it is patently inadequate for a country of the size of India, and it is high time the universities recognized the importance of the discipline and did something to promote and proliferate knowledge of conservation as well as research in the area as quickly as possible. Mention must, however, be made for the very valuable contribution made in this direction by the M.S. University of Baroda and the Benaras Hindu University in the recent years. To begin with, one of these centres may be built up as a Central University Conservation Laboratory, for analytical and applied research, conservation of museum objects as well as for the training. *A Museum of Analysed and*

Conserved Objects can as well be set up at the chosen centre to serve as visual symbol of the work done. This may pave the way for founding similar centres at other places in course of time in the light of the experience gained, and setting up a network of conservation laboratory-*cum*-training centres attached to the museums under the universities.

The practical aspects of the employment potential of university trained people in the discipline of the conservation cannot, however, be overlooked before a scheme is launched. But we can take comfort from the fact that museums are growing institutions, and more institutions are coming into existence every day, and there would always be sustained need for the conservation of the cultural property at all times also in the unforeseeable institutions of the future. We must also take into consideration the fact that a far larger volume of vulnerable cultural property in the form of manuscripts, paintings, textiles, metals, coins, leather goods, and wooden objects, etc., still continues to be with the institutions or the individuals who cannot afford to expose their heirlooms to the costly and time-consuming processes of the conservation, even though the need to conserve them all from the nation's point of view is insistent and a compelling force. The university centres of conservation may also take up the conservation of materials in the possession of such individuals against some payment, and the money receipts may meet part of the expenses to support the scheme.

The point that is sought to be made here is not merely the importance of the conservation work but also the enormity of its volume and the continuous challenge posed by it and the need for the recognition of its rightful role in the museum and in the education system, as an academic discipline and practical professional advancement.

H. Need to Develop Museums or Collections for Extra-Indian Art and Archaeology and of Expertise in These Areas

It may be stated that the approach of the museums in India, in general, and the education system in their academic discipline in particular, is rather limited. In spite of the established fact that neither history nor any of the products of history can grow in isolation, we have few experts in the archaeology, history, anthropology and art of our immediate neighbours, not to speak of those further afield. We have no sizeable collection of the materials of any of these areas in our museums. Though we have a unique collection of the Central Asian Antiquities and Murals, ranging in point of time from the third to the ninth century A.D. at the National Museum, New Delhi, we have only a few experts in the arts and archaeology of Central Asia, and almost none in the areas of Egypt, West Asia, Afghanistan, China, Korea, Japan, Sri Lanka, Burma, Malaysia, Combodia, Thailand, Vietnam or Indonesia, not to speak of the regions further beyond. This is sharp contrast to the situation prevailing in the West. It is perhaps in the normal course of trade that objects of art, anthropology and archaeology from all parts of the world have travelled by the normal interaction of the laws of supply and demand to the museums of the West. But it also speaks volumes for the eclecticism and catholicism of private perspicacity and affluence that have primarily provided the present and future generations with the opportunities for not merely learning the history, traditions, languages, religions, sciences and arts of the diverse parts of the world in the Western countries, but also for building up the expertise in these areas.

There is no comparable situation in India, but for the lonely figure of Salarjung, who did indeed assemble a motley collection of the arts of the east and west, as best as he could appreciate and afford. There are indeed a few isolated instances of extra-Indian collections in some of the museums in India such as the Prince of Wales Museum at Bombay or the Baroda Museum and Picture Gallery, or the Salarjung Museum at Hyderabad but they do not add quantitatively or qualitatively much to compare with the extra-territorial contents of their counterparts in the West or even to form the basis of substantial extra-Indian studies at home. Nevertheless, the need to develop expertise in these areas, and to build up nuclear collections of extra-Indian art by a judicious system of coordinated exchanges between the museums in India and abroad can hardly be over-emphasized. At the same time courses for the building up of the expertise in these diverse areas may be provided in the universities as well as in the museums. This by itself is not enough. The experts must also have opportunities to develop and advance their expertise in suitable institutions that may be set up with an integrated system of promotion *in situ* to enable them to intensify their expertise and proficiency to the highest level and to prevent them from becoming wandering minstrels constantly in search of food and shelter with a begging bowl in hand even by changing the lines of their choice or specialization under mounting economic pressures. This is an area in which the universities can make a solid contribution in collaboration with the Archaeological Survey of India, the National Museum, other major museums of the country and some of the established museums of the universities. Even an humble beginning at one centre would surely lead to the tremendous progress in the course of time. There should be no bar to inviting visiting professors from abroad, if necessary to initiate the courses before the Indian experts can fend for themselves. This is not a mere academic luxury for such courses would also promote better understanding of the motive forces of life through centuries in different parts of the world, and help us to come closer culturally and politically.

I. Need to Develop Tribal and Folk Art Museums and to build up Expertise in the universities

It would not be an exaggeration to say that the vast treasures of the so-called tribal arts and crafts as well as folk arts in India do not receive the measure of attention from the Indians from various reasons such as their fistance from the elitist urban areas where sophistication snobbishly thrives, as well as due to their simplicity, if not crudeness. The recent discoveries of the paintings in the Bhimbetka area near Bhopal have proved to hilt that the traditions of the arts, including the very motifs and motives, go back to our pre-historic days, and constitute the hard core base of our later sophistications. Yet they are fast disappearing through the depredations of time, growing apathy of the concerned tribes or folks in their own cultures in the wake of the benefits of modern education and living, ignorance of the urban elitists and, to no less extent through the collections made by the lovers of cultures of the tribes and folks from all parts of the world, for they do not come under the prohibitive purview of the Antiquities and Art Treasures Act, 1972, or the Wild Life Protection Act, 1972, or even under the Customs Act.

The Anthropological Survey of India with its network of offices throughout India is, of course, doing its best to gather and preserve the traditions of the tribal cultures and also setting up tribal museums at the different centres. The tribal welfare or research institutions are also contributing their mite in this direction. In this context the step taken by the Government of India to set up the Museum of Man in the idyllic background of Bhimbetka and in the environs of pre-historic and tribal India at Bhopal is highly laudable, all the more so because of its ideal distance from the idle sophistication of the capital of India. While the projected Museum is yet to came into existence, there is a lot that the universities can do to promote the anthropological studies in the universities by intensifying the courses where they exist, and by instituting courses in centres where they do not, and also by setting up museums in conjunction with the courses both for collecting the specimens of the tribal and folk arts and crafts and for teaching the subject under the auspices of the universities.

In this context mention may be made of the 'Village Complex' built up at the Pragati Maidan on the Mathura Road in New Delhi, where a cross-section of rural India, in all its faithfulness and charm, has been erected for the delection of the busy denizens of the capital. The very fact that the complex attracts and informs and causes no end of delight to all who saunter into it, is the justification for the plea earlier made for setting up museums of tribal and folk arts as much in the tribal or rural centres as in the urban areas, the former to foster pride among their makers, and the later to make the town-folk and urbanites aware of the richness and variety of our cultural heritage. It is in the fitness of things that the 'Village Complex', also forming an example of an open-air museum, is under the Crafts Museum, New Delhi.

J. Conclusion

In conclusion, it may be stated that the educational role of the museums and their importance in a country, where the majority is uneducated, need not be over-emphasized. The urgency, therefore, of integrating the museums with the educational system in the country at all levels, and recognizing suitable institutions as educational institutions of universities status can only be indicated and urged. To achieve the objective of education within a short period and yet keep it as on going process, it would be necessary to set up a large number of museums specially Children's Museums at all levels and support them adequately in order to enable them to discharge their educational duties properly at the basic level.

In view of the imminent and existing threat to the objects of tribal arts and crafts as well as folk arts, it would be most desirable to collect such materials on an extensive scale at an early date, and to set them up eventually with well documented data at the museums for the purpose of preservation of the traditions and making investigations into them and for the purpose of the education of the masses into the thought processes and aspirations of the tribal and simple people who are rapidly changing their ways of living, particularly also because the extant objects themselves may soon be extinct.

As a matter of fact, the working group set up by the Department of Culture, Government of India, towards the end of 1977, has made a strong recommendation for the development of museums in India to make them more education-oriented and emphasized the need of setting up museums at the regional, state, district and village levels towards achieving the objective, all as a phased programme under the Sixth Five Year Plan.

It is hoped that these ideas will receive due consideration at the hands of all concerned.

8

Museums in Educational Institutions

A. Introduction

The role of museums in the teaching of diverse subjects in educational institutions cannot be overemphasized. A visit to a Zoological park is surely more educative than a series of talks on wild animals, their appearance, food habits, habits of behaviour or habitats, etc. If such visits could be combined with or followed by visits to Natural History Museums where the dead representatives of the animal specimens themselves, their utility, and their interrelationship with man, ecology and environment are graphically exhibited in the form of dioramas together with other essential audio-visual devices the necessary lessons would be indelibly impressed upon the minds of the education seekers, especially the young. But in the Indian context it is still a cry in the wilderness, for the Natural History Museums except for the National Museum of Natural History at New Delhi, are ill equipped to fulfil their tasks satisfactorily.

It is also to be considered that not everything that is worthwhile to learn can be imbibed either from the zoo or from the museum. But these serve as eye openers, excite curiosity and promote enquiry and cultivation of knowledge. In a larger sense even the zoological parks are also museums of a kind modern technology of different categories of audio-visual aids such as slides, filmstrips, taped and synchronised speeches not to speak of television helps to make such visits much more meaningful, educative and no less delightful experiences. But such devices are expensive and not within easy reach of most museums for the same reasons dioramas are also difficult to instal.

Enough has been said to show that there is a positive role for museums in the teaching of basic subjects in all educational institutions such as schools, colleges and universities. The museum collections also help to promote research in varying degrees, whether carried out by university researches or by those working in exclusive research institutions. It has, however, to be pointed out that museum collections by themselves may not suffice to teach a basic subject in any discipline. It has to be conceded that the formal theoretical teaching in the classroom is unavoidable.

The museums help to supplement the inevitable gaps that such teaching cannot fill, even when audio visual materials are also employed for the purpose. The museums, therefore, are essential adjuncts of educational institutions in modern times.

The museum collections, both on display and in the reserves, help also in the conduct of research, but not to the same extent in every disciplnie. For example, collections of art, archaeology and anthropology are more directly the materials of research than those in most other disciplines of science and technology or natural history. Archival documents or manuscripts of sorts are first class research materials on a variety of subjects like history, politics, economy, sociology and the like. Archaeological materials are indispensable in any scheme of archaeological research. That art, history, or varying styles and schools of artistic activity or the technologies employed for the purpose of producing art objects cannot be taught or researched upon without the aid of actual art objects is easily understandable. For the proper understanding, and teaching of architecture and researches thereon there is no alternative to the actual examination of the architectural monuments on the spot. These also constitute open air museums of architecture as it were. Scale models, measured drawings of sections, plan and elevation, blow up slides, poster and filmstrips do of course serve a second best educational media. They also supplement field observations as visual materials in a museum or in an educational institutions.

B. Departmental Museums

The museums of the educational institutions in India are generally meant exclusively for the concerned departments or faculties, and are usually closed to the public. They are open for short spells of time on the rather limited number of working days of the institutions. This is a great deprivation to the general public who are becoming increasingly museum conscious. And the general public encompasses the rich as well as the poor, men and women, children and adults, the able-bodied and the handicapped, the educated and the illiterate, and urban people as well as the rural populace. This lacuna in the role of museums as educational institutions is obvious. In view of the expanded interests of the general public means have to be found to remove the lacuna and throw open the doors of these museums to the public and keep them open on all days on which museums in general remain open.

The signal service that is being rendered by the National Centre for Cultural and Educational Resources in New Delhi, under the Department of Culture of the Government of India, is too well known to be detailed. Nevertheless, it would suffice to mention that its ultimate objective is to equip every school in India with its own collection of plaster casts of a set of representative sculptures of India, a large number of slides on art and architecture, cassettes of recorded speeches of accredited experts on diverse aspects of Indian culture such as art, architecture, painting, dance, drama, music, literature, religion etc. and a trained and oriented teacher. The guiding concept is the need to educate the future generation in all aspects of Indian culture so that they emerge as property-oriented citizens of India. But the instructions that they receive in the process are supplementary to their formal curricular education and there is no element of compulsion in the course.

If a similar course could be devised for science, technology and natural history it would help widen the horizon of the school children enormously and would turn them out as better citizens. This would widen their general understanding of all scientific phenomena and may perhaps rouse their curiosity in general.

These courses can be adopted for adults as well, in some cases serving as audio-visual refresher courses. Needless to say these courses have, of necessity, to adopt museum methods and would have to be museum based. Close links with museums with arrangements for holding thematic exhibitions and science fairs periodically would further enhance their value and effectiveness.

The logical culmination of such methods would render every school into a mini-museum, and as a result education would be fuller than otherwise. But even so they would not be able to eliminate the visits to museums, for their major and expanding role in supplementing the educational programmes of the schools is indisputable.

C. Museums in the Educational and Research Institutions of West Bengal

1. *General*

The present status of museums in the educational institutions in India and their actual utility in the transmission of knowledge can be understood better with the actual examination of the activities of such institutions. It would be a wide canvas if all such institutions are dealt with in a small seminar paper. It is proposed, therefore, to deal with the concerned institutions of West Bengal in this context, particularly because West Bengal has the largest number and variety of museums in educational institutions. These institutions are listed as follows:

Sl. No.	*Name*	*Institution*
	I. District Barddhaman	
1.	Museum and Art Gallery (Art Museum)	Burdwan University
	II. District Birbhum	
2.	Kala Bhavan (Art Museum)	Visva Bharati Santiniketan
3.	Rabindra Sadan (Personalia Museum)	-do-
	III. Calcutta	
4.	Anthropology Museum	Calcutta University
5.	Asutosh Museum of Indian Arts (Art and Archaeology)	,, ,,
6.	National Medical College Institute Museum	,, ,,
7.	Calcutta Medical College—Pathology and Anatomy Departments	,, ,,

Sl. No.	*Name*	*Institution*
8.	Nil Ratan Sarkar Medical College Museum	Calcutta University
9.	R.G. Kar Medical College Museum	,, ,,
10.	Department of Zoology Museum (Natural History)	,, ,,
11.	School of Tropical Medicine Museum (Medical)	,, ,,
12.	Commercial Museum Department of Geography	,, ,,
13.	Haraprasad Sastri Museum (Art and Archaeology)	Sanskrit College
14.	Ethnographic Museum Cultural Research Institute	Govt. of West Bengal
15.	Jute Museum	I.C.H.R.
16.	Jute Technological Research Laboratory Museum	I.C.H.R.
17.	Asiatic Society Museum (Art and Archaeology Museum)	Asiatic Society of India
18.	Bengal Veterinary College Museum	Bengal Veterinary College
19.	Glass and Ceramic Research Institute	C.S.I.R.
20.	Rabindra Bharati University Museum (Art and Personalia)	Rabindra Bharati
21.	Institute of Port Management Museum	Institute of Port Management
	IV. District Darjeeling	
22.	Himalayan Mountaineering Institute Museum	Himalayan Mountaineering Institute
23.	Museum of Dow Hill Forest School, Kurseong	Govt. of West Bengal
	V. District Hooghly	
24.	Textile Museum, Hooghly	College of Textile Technology
25.	Carey Museum, Srirampur	Srirampur College
	VI. District Medinapur	
26.	Museum of Hamilton School, Tamluk	

Sl. No.	*Name*	*Institution*
	VII. District Nadia	
27.	Museum of the Department of Agriculture, Kalyani	Kalyani University
28.	Deptt. of Botany Museum (Natural History)	,, ,,
29.	Deptt. of Zoology Museum (Natural History)	,, ,,
	VIII. District Purulia	
30.	Ramkrishna Mission Vidyapith (School) Museum	
	IX. District West Dinajpur	
31.	College Museum, Balurghat	

Of the 31 museums in the educational institutions of West Bengal, 4 are museums of Art and Archaeology, 5 are medical museums, 3 are of Natural History, 2 of Jute Technology, 2 are school museums, and 3 are college museums. There is one museum each in the disciplines of (i) mountaineering, (ii) glass and ceramics, (iii) veterinary science, (iv) geography, (v) forestry, (vi) textile technology, (vii) port management, (viii) agriculture, (ix) anthropology, (x) ethnography, and (xi) personalia, respectively.

It may be observed that there the two school museums and three college museums are not directly connected with school or college curricula, though the presence of a museum in the premises of an educational institution does help generally to widen the horizon of the students. Some of the objects in the Sanskrit College at Calcutta may, however, help promote research.

2. *Merits, Demerits and Remedies*

It is quite apparent that all these are small museums, and ancillary parts of larger institutions. As a result they do not receive the measure of attention that they normally deserve. It is but natural that the financial allocations for such institutions cannot be large, nor can the staff structure be adequate. Even so the staff salary structure may not be as attractive as in a full-fledged museum or an exclusively museological institution.

It must how be recognized that museum service has become highly specialised now-a-days and unless the staff structure is adequate and the salary scales attractive enough such museums would not be in a position to deliver the goods adequately.

Very often, owing to the small size of many of these museums it may be too expensive to go in for all the modern equipments for museological purposes. Considering, however, the importance of the museum as institutions *per se* they should be provided with all the equipments for presentation, documentation, conservation, security and education of the students as well as of the general public. If this is not done they would not be in a position to serve their role properly. But this may not be immediately practicable owing to financial constraints.

Where there are several departmental museums in a university campus it may be helpful to pool the resources and combine all the departmental museums into a common museum, so that much overhead expenditure can be cut out by avoiding duplication of staff and equipments for different aspects of museological work such as photography and documentation, security, conservation, presentation, education etc. And the museum staff itself can be placed under a common Directorate. If such an arrangement can be made, the combined museum would be much more effective than the separate small museums. Under such an arrangement all the different faculties of the university can be drawn upon for co-operation for purposes of teaching, acquisition of exhibits and for development.

Even where the museums are not on the same campus but scattered all over a city as in the case of the university museums of Calcutta, a great deal of inter-museum co-operation can be established and common devices used for exhibitions, teaching, conservation and research through a united overall control. Even the normal educational role of these museums can be utilized better by making them supplement one another through a commonly worked out programme of utilizing the museum materials for such purpose.

Even the museums which are not part and parcel of any educational institution or any university have large collections which can also be used both for education and research by special arrangement with the educational institutions. The question often arises as to who would take the initiative in the matter. In view of the accredited educational role of museums in general, the initiative would rest on both the sides. The museum curators in general are academic persons and in the course of their work they develop considerable expertise in their respective areas of specialization. This factor should be borne in mind by the educational institutions and the expertise fully utilised both education and research. All they would need to do would be to recognize the accredited curatorial staff for teaching as well as guiding research work. As a result the entire student community would be benefited and the researchers no less, for many original materials in the reserves of the museums would be accessible to the researchers in this process.

3. *Specific Museums*

The working of some of the museums in the educational institutions of West Bengal may now be examined.

(*a*) *The Anthropology Museum, Calcutta University*

This was the first museum of its kind set up under the university system in India, in 1920. The collections are indeed used for teaching in their three categories of (i) physical anthropology, (ii) pre-historic archaeology, and (iii) socio-cultural anthropology or ethnology. The last comprises tribal materials. For purposes of practical training the teaching Department makes use of the Department laboratory as well as the Departmental library. There is a little co-operation between the museum and the working of the Anthropological Survey of India, the headquarter office of which is in Calcutta, or the Anthropological Section of the Indian Museum. This museum, however, is not open to the public, nor is it set up as a full-fledged museum in its own right. It is no doubt useful for teaching as well as research purposes, especially in the field of archaeology in its limited area of pre-historic archaeology. There is scope, however, for greater collaboration with the University Department of Archaeology.

The other aspects of museological activity, namely publication, holding of exhibitions, inter-museum co-operation and extra-curricular educational activity do not receive the measure of attention they deserve, for reasons of unadequacy of staff, paucity of funds and a lack of policy towards this end.

(*b*) *The Asutosh Museum of Indian Art, Calcutta University*

Though this is the first full-fledged University Museum in India, being founded in 1937, and had a first rate collection, especially in the area of folk arts, and had taken a lead by carrying out several excavations to augment its collections and even setting up a diploma course in Museology as far back as 1959, it has now fallen from its position of pre-eminence. There are several reasons for this turn of events. It cannot be considered to have an ideal display in its galleries. Its co-operation with the Department of Museology is minimal, and it is indeed a pity that the Museum cannot utilize the services of the students and teachers of the Museology Department to make new experiments in display or holding special exhibitions of any kind. In fact, there is now a dichotomy between the museum and the Department of Museology even though the latter is located in the same building. The Curator of the Museum is no longer a teacher nor head of the Department of Museology, as a result of which the collaboration between the two is minimal. Though it is indeed open to the public, it observes all the university holidays, except of course the long vacations. It does not have any special programme of education of the public. In this respect it contrasts very sharply with the Bharat Kala Bhavan, Benaras Hindu University, which goes out of the way to fulfil its role as a Museum, even though it is within the University system. The authorities have to thank themselves for this state of affairs, and it appears that the Asutosh Museum is letting go of the tremendous potentialities of a museum as an educational institution in spite of its being in an educational institution itself. Perhaps shortage of funds is an inhibiting factor, but this can be easily surmounted with the help, the U.G.C., for there can be no gainsaying "where there is a will there is a way".

It is indeed true that it may not be practicable for even a university museum to combine curatorial duties with regular teaching work, for the curatorial work in a busy museum can be quite heavy. Nevertheless, it should be possible for the curatorial staff to undertake some teaching work as well as undertake to guide research in the areas of their specialization. This has already been indicated earlier in the context of the utilization of expertise and resources of museums in general. Such an arrangement made on a regular basis would be mutually beneficial to all concerned. In fact, such an arrangement has been introduced in the Bharat Kala Bhavan, with the blessings of the U.G.C. with telling effect.

(*c*) *The Medical College Museum, Calcutta*

These museums provide considerable help indeed in giving practical instructions to the students in several aspects of medical science. The attached hospitals often and usually supply many of the educative specimens. Here again the scope and opportunities of the different other aspects of museological work are limited owing to the limited interests of the authorities. If, however, these institutions pool their resources and build up a large and common museum, the educational activities as well as other museological work can be carried out more effectively. Such a museum can be entrusted to the charge of properly trained museological personnel on a rational basis. The medical students from the different colleges can assemble in the common museum for instructional purposes in keeping with the requirements of their curricula and can dervie greater benefit from a larger collection and a properly organized museum. Such a museum can also be thrown open to the public for better effect. The highest expertise of the different institutions can be pooled and turned to good account for museological and educational purposes.

(*d*) *Other Museums of Extraordinary Inertest*

Mention may be made, in particular of some museums of extraordinary interest and usefulness for purposes of instruction in the themes concerned. These comprise the Ethnographic Museum of the Cultural Research Institute, the two Jute Technology Museums, under the I.C.A.R., the Glass and Ceramic Research Institute Museum under the C.S.I.R., the Himalayan Mountaineering Institute Museum, Darjeeling, the Museum of Dow Hill Forest School, Kurseong, the Textile Museum of the College of Textile Technology, Srirampur, and the Museum of Institute of Port Management, Calcutta besides the Agriculture Museum of the Kalyani University and the Commercial Museum of the Calcutta University.

Despite the usefulness of these museums for the purpose of the education of students of the concerned disciplines, they would not be in a position to undertake or excel in the other essential aspects of museum work, especially as educational institutions for the general public. The reasons are not far to seek. They may be enumerated as inadequacy of funds and staff, smallness of the collections, limitations of space, not to speak of an understandable lack of urge to develop the museological aspects of these institutions owing to their limited approach and outreach in spite of growing interest of the public in the concerned subjects and materials. The lack of promotional avenues in small museums and lack of mobility of personnel between museums of varying disciplines are contributory factors to the state of affairs in these small museums of otherwise absorbing interest.

4. *Conclusion*

The usefulness and importance of such museums can be brought home to the public if common programmes could be worked out periodically in collaboration with the National Council of Science Museums in most cases, or the National Museum of Natural History in the case of the Museum of Dow Hill Forest School, the Jute Technology Museums, and the Museums of Agriculture and Commerce, or the larger regional museums or the National Museum in the case of the Art and Archaeology Museums.

It is easily recognised that these small museums cannot be easily brought under unified control owing to the diversity of the parental controlling institutions, nor can large funds be released at once for their large scale development, without an in-built infrastructure, or a carefully worked out blueprint. Considering, however, the important role of the museums in the education system, commonly for the professional students and general public and generalist, administrators, they should all be brought on a par with educational institutions of comparable status, also in the matter of scales of pay. Such an arrangement would surely attract talented persons to man them, and would establish the much desired mobility between museum and museum, which is so essential for a proper and healthy growth of museums in India.

Some or most of the suggestions would apply equally to diverse categories of small museums in educational institutions in our country.

The subject was debated as the focal theme at the annual general conference of the Museums Association of India held at New Delhi in December 1985. It was felt by the assembly of learned museologists that it may not be possible in the present circumstances to coalesce the different departmental museums, of rather small size, belonging to a university into a single large museum, nor find the funds or man-power to develop them on full museological lines. It may not, therefore, be possible for the present to change their character. They should, therefore, continue to serve the needs of teaching and need not be turned into public museums. They should, however, be distinguished from large multi-purpose museums functioning under one roof in the university system, which may be designated as university museums. The distinction sought to be made may not, however, be tenable in the ultimate analysis. No museum on earth, howsoever limited in size or purpose, can remain static for long. Sooner or later the collections may grow and may justify a larger building and a larger staff. It would, therefore, be much more desirable in the long run to develop a single large museum than develop a multitude of mini-museums each independent of the other. Of course, there cannot be any hard and fast rules relating to the optimum size needed for coalescence into a single museum nor can there be any justification for keeping the public out of the departmental museums for human curiosity is insatiable and seeks to find the end of all subjects it feeds on.

It would indeed be a long drawn out and tortuous process to deal separately with all departmental museums (often no better than a medley of haphazard collections) belonging to universities or comparable educational or research institutions. But the general trend in the long run would inevitably be towards coalescence and growth into larger, single or multiple museums.

9

Displays or Presentation of Exhibits

A. Introductory

John Wolfenden in the Foreword to Edward Miller's interesting history of the British Museum under the very striking title, *That Noble Cabinet*, raised the following question, "Who is the museum for ?" "Is it for the scholar or for the general public ?" And he answered, "It is for both, and for many other categories of persons too, who occupy place in the spectrum between the world famous scholar at one end and theram-pageous school child on the other". It is like "a post-graduate university", 'a country house' and a 'funfair'. "It is an institution which is visited for purpose of work or pleasure or both by annually increasing numbers of people from every part of the globe".

Though the statements were made specifically in regard to the more than 200 hundred years old British Museum in London, it is equally applicable to any museum in any part of the world to day. But the museums were not meant to be what they are to day when had first been set up. The British Museum itself began as a private collection of an eminent medical man, Sir Hans Sloane, pieced together for his own pleasure, and kept in his own house for a great many years. The collection was bequeathed to the nation for a comparatively small sum of £ 20,000. It developed into a great institution as a result of its combination with a large or rather two libraries merged into the British Library. But the building where it was housed was not specially built to serve as a show house or as a library. The displays of the museum objects too, were not meant to serve the present role of museums.

When the history of any museum is taken up it may be observed that the collections in most cases were made by private individuals to begin with and they later grew into governmental or national institutions. The collections of all nature were made according to the predilections of the collector's own educational background and interests. These arose primarily out of curiosity and a spirit of enquiry, and a hunger for knowledge of the everwidening phenomena of the handiworks of man and nature and of course love for things of beauty. Sometimes the objects were carried away as trophies of war. The most notable example is the Rosetta Stone which was stumbled upon by a French soldier during the Napoleonic wars in Egypt in 1799. It was brought to the notice of Napolean himself. He realised its importance at once and had copies made of the bilingual inscription in three scripts, namely, Greek, Demotic and hieroglyphic covered on it, and distributed to well known French scholars of the time. But with the defeat of the Napoleonic troops by the English Admiral Nelson at the battle of Trafalgar in 1806, the Rosetta Stone changed hands as a war trophy and eventually passed into the British Museum. It may be mentioned in passing that Napoleon's curiosity and foresight bore fruit in course of time and it was a French scholar, Champoullion, who eventually deciphered the Egyptian hieroglyphic for all the world some years later.

Many more such examples of the facts of museum history in an age of 'exploration' and 'enquiry' if not of 'reason' or 'public education' can be cited. It was thus the motivation of museum formation in the early days and the circumstances of the growth of the collection which determined the purpose and style of presentation in the formative days of the museums. The limitations of the various kinds of materials availabe for display were also the other delimiting factors, if perhaps slightly less compelling ones, for the adage "where there is a will there is a way" equally held good in the good old days of enquiry and curiosity and, if the word may now be used, of curiosities gathering up in the cupboards of the collections, and even of museums.

The year 1983 marked the three-hundredth anniversary of the supposed oldest museum of the world, namely the Ashmolean Museum of the University of Oxford in England. Even this museum had begun as the private collection of a man of trade called John Tradescant, who turned his honest savings to good account by investing in the collection of antiques and curiosities. From him it passed on to his heir, the younger John Tradescant. When his only son died the latter made over his entire collection in grief to his friend Elias Ashmole, and the last, in his turn, made over the collection to the University, and it was after him that the Museum came to be known as the Ashmolean Museum. Thus even the Universities, where education is actively pursued as a profession and benefited from the legacy of the curious and generous collectors but could not take to using the museum for education at once. Since the collections were not the result of any deliberate or scientific expedition, they were not necessarily interconnected or integrated into a homogeneous group or as well documented as to provenance and other relevant date as would be necessary for a proper interpretation and informed presentation. Thus research on the collections must precede any attempt at an educative presentation, for the educators and to take time to educate themselves. A recent enquiry as to the details of some megalithic remains from South India and at the Museums revealed that the available data are incomplete and totally inadequate.

To take just one example. Nearer home, the famous Bharat Kala Bhavan at Varanasi has a similar history, though of much more recent times (1920). It passed into the Banaras Hindu University in 1950 with the realization of changed concepts about the role of museums. In newer hands the museum too has changed its appearance and presentation.

B. Traditional Display

1. The Role of Architecture

(a) *The Indian Museum, Calcutta*

The oldest and the largest museum in India, namely, the Indian Museum at Calcutta, is the result of the efforts, of a band of foreigners, who had assmbled in Calcutta for reasons of trade or service under the East India Company. They were naturally fired with a spirit of enquiry into the history, geography, geology, flora and fauna, languages and literature of the alien land they had come to rule. The knowledge thus gained would also help them in the administration of the country that fortune had placed in their hands. Each one in his own way and pursuing his own line of interest made the collections for the newly, founded Asiatic Society of Bengal (1784). When the collections grew beyond the scope of the Asiatic Society's building to contain them, they thoughts turned to the setting up of a separate museum, and the conception become a reality in 1914. But it will not till 1874, that the present building housing the museum was conceived and made a reality as the first museum structure in India built specifically to serve as a museum. It was not till 1978 that the building was actually commissioned. It is a magnificent building with an imposing appearance, in keeping with the grandiose architecture of the times, with tall walls, a high roof, large doors and windows, tall elegant columns, and spacious verandahs and a large enclosed court, all of which were necessary in those days to withstand the onslaught of a climate that is at once humid and hot almost throughout the year. The idea that it must serve as an educational institution and that university classes should be held in its galleries was first expressed by Sir Asutosh Mukherjee, then Vice Chancellor of the Calcutta University, on the occasion of the centenary of the Indian Museum in 1915.

(b) *The Victoria Memorial Hall, Calcutta*

Likewise the Victoria Memorial in Calcutta built as late as 1921 in the centre of a large sprawling garden is a magnificent piece of a architectural marvel. It springs up like an elegant design in soft white, embossed above a lush green lawn and is a piece of beauty. Yet it is not suitable for a museum for the objects that might be displayed therein would be completely dwarfed by the mass and architectural quality of the building. Nor can any permutation or combination be easily made to suit the requirements of modern displays without damaging the unbroken and delicate surfaces of the marbled walls and floors. Its innumerable openings cannot also be blocked up as it will at once stop the circulation of air that keeps it cool, or the flow of light that illuminates it and make it look like a solid block. Artificial modern devices will at once mar the beauty of its form and feature and will be devastatingly disturbing. The lack of extra space for stores, workrooms, laboratories and libraries, or office space in the building has led to the adoption of all kinds of subterfuges, not at all satisfactory. They are at once an index of the lack of foresight of the planners and of co-ordination between the promoters of the idea of a memorial museum in honour of Queen Victoria and the architects, not to speak of lack of foresight in regard to the inevitable prospects of change and expansion with the passage of time. From this the architects must take a lesson, for a building is not merely a thing of beauty and a source of joy for ever, but must also serve the utilities of the generations over the centuries of its anticipated life.

(c) *Miscellaneous Museums*

Much the same may be said about the building housing the Museum and Picture Gallery of Baroda or the Prince of Wales Museum at Bombay or the State Museum (formerly the Napier Museum) at Trivandrum. The buildings themselves or their environments are very elegant and attractive indeed but the structures are not suitable for museums or their expanding roles.

(d) *Zakir Hussain Memorial Museum, New Delhi*

Museum buildings, designed and constructed in more recent and enlightened times, are not also free from defects that dog the growth of a museum or its activities. The circular form of the Zakir Hussain Memorial Museum in the premises of the Jamia Milia Islamia, in Okhla, is a case in point. Not merely have the object to be set up against a curving background and even though this problem can be surmounted, the problems of extra space for temporary exhibitions, storage, workrooms, laboratory, or even for educational activity are missing and cannot be introduced without unduly and seriously cutting into the minimum space needed for exhibiting a representative number of items and carrying out other activities without altering the plan and design of architecture.

(e) *Archaeological Site Museums*

Most of the Archaeological Site Museums in India seem to suffer from the defect of absence of inbuilt scope for expansion for serving the needs of modern concepts of museums. While the museums at Red Fort, Delhi, Tipu Sultan's Palace (Daria-Daulat Bagh), Srirangapattana, and the old palace at Delhi the museum at Goa are all circumscribed by architectural limitations, the newly built museums too are without any scope for expansion.

(f) *Salarjung Museum, Hyderabad*

The Salarjang Museum at Hyderabad is comparatively a newly and deliberately erected museum building, and is the result of much travel by the formulator of the conception and much deliberation among architects and governmental authorities. Yet it is not an ideal museum building, as the galleries are not interconnected, nor do the walls have continuously undisturbed surfaces, not to speak of defects of accoustics, or lack of storage or working space etc., or space for seminars, lectures, or temporary exhibitions, etc.

(g) *Science Museums*

Thus it is clear that architecture plays a major role in the execution of displays in modern museums. In India the National Council of Science Museums have been having a field day, as they have their choice on what shape, form or size their galleries should be by planning in advance and submitting their plans to expert bodies of divergent disciplines. Their new museum at Bombay is in keeping with their planning and concept of the museum as an educational institution. They are at a planning stage for their Museum is to be named after Nehru too, at New Delhi.

(h) *The National Museum of Natural History*

The National Museum of Natural History in New Delhi has had no choice in the buildings, as such, but the structure itself is a non-descript pile of floors upon floors, without of course the imposition of large doors and windows, conforming to modern concepts of office space only. That even such a building can be adapted with imagination to suit the requirements of the handiworks of nature in the form of flora and fauna, and can be transformed into a multi-terraced mini-museo-zoological garden has been ably demonstrated by the wizardry of Dr. S.N. Nair and his devoted band of colleagues, thanks also to the very large measure of sympathetic support that the museum received from the eminent men of science at governmental level. With all this it is pre-eminently the most modern museum both in concept and outlook as well as in function of our times in India. The lesson is 'where there is a will there is a way'.

(i) *The National Gallery of Modern Art*

The National Gallery of Modern Art is housed in a modern palace built with a medieval outlook. Situated picturesquely at a curve on the edge of sprawling garden at the back, it is an example of what use imagination can make of modern techniques of lighting, colouring, spacing and principles of display for pleasure and aesthetic communication by using even small-sized, rooms for purposes of display and even temporary exhibitions of works of art from all parts of the world to great effect. The needs of an educational institution are not overlooked either.

(j) *The National Museum, New Delhi*

The National Museum building was built only recently, i.e., in 1960. Even so its walls are often not as tall as may be necessary to display large objects or even murals such as those from Central Asia which are still displayed in the traditional style in their old home, the erstwhile Central Asian Antiquities Museum, standing on the adjacent ground. The curator's workrooms are designed to be at one end of each gallery. Though this may keep them close to their galleries or stores, they must clear out at closing time and have no place to work in if the needs of research of urgency of any work demand it. The visitors wishing to call on them must traverse through the galleries, giving rise to possible problems of administration and security which cannot but exercise an influence on the method and quantum of presentation.

(k) *Nehru Memorial Museum, New Delhi*

The Nehru Memorial Museum at New Delhi is set up in the old Commander-in-Chief's residence which was taken up by Jawaharlal Nehru during his years of Prime Ministership. It was, therefore unsuitable for a museum *per se*. But as a personalia museum is best built around the place where the person concerned has lived and moved about; the personality of Nehru is best brought out by the layout of the museum in the place where he lived for nearly 17 years of his life. But the same cannot be said about the Zakir Hussain Memorial Museum which has been built in a rather cramped circular structure specially built for the purpose in the premises of the Jamia Milia Islamia where he had spent many years of his exemplary life. His tomb nearby is also an exhibit as it were and all these, in spite of the inadequacy of the museum building as such help recreate some large part of the flavour of life of the departed savant.

(l) *Crafts Museum*

The new premises of the Crafts Museum at Pragati Maidan, New Delhi was built with deliberate planning, and it has been set up ideally in an open air complex of a cross-section of rural or tribal India, where the noise of the tools of the rural craftsmen or the soft humming of the tunes that keep up the spirit of the folks and hold the rhythm of the tenor of the craftsmen's lives and lend life to it as a back drop. It has scope for infinite nuances of experimentation towards perfection, which sets no limit nor knows an end, and poses a constant challenge. The sprawling grounds around and the exhibitions of modern industries and technologies that are frequently held in close vicinity break ever new grounds of exhibition techniques and present a pleasing contrast between the heritage of ancient and traditional crafts and modern achievements.

2. Traditional Styles of Display

With the limitations imposed by architecture, the displays in museums could make use, as usual of (i) the wall show case, (ii) the table show case, (iii) the island show case, and (iv) the corner show cases, respectively. Use was made of pedestals as well. As the displays were not oriented towards a complete communication, the labels were also not as detailed as they ought to be. The lighting most often used was natural light, and when electricity was introduced electric bulbs or incandescent lamps were also used as fixtures with effect. But the decorative patterns of furniture and their colour and polish used distracted far more attention than the objects themselves. Artistic displays with spacious layouts were almost unknown. Very little attempt was made to make a selection of representative types, the endeavour being to store and preserve as much as possible, no distinction being often made between a public gallery and a store room. As a result crowding invariably occurred. Labels in such an environment could only serve as marks of identification for the benefit of the curator and allow one another out or strike a jarring note. They were also painted on wooden plates of blocks, and occupied a good deal of space.

In the conception of the present discussions on the traditional style of displays it was the objects themselves that formed the main focus of attention and were untrammelled by artificial aids of any kind to set them off. Though such an abstract idea is not conceivable in practical terms, by and large what is meant is the exclusion of any kind of supporting aids to provide the objects with a suitable shelter and a background, which are the minimum requirements of any display, traditional or modern.

As a member of a U.G.C. Visiting Team in 1978, the author can recall to mind the dogged insistence of a well known senior India professor of archaeology at one of the leading universities of India on displaying all the artefacts he had discovered, at the university's newly opened Archaeological Museum. All efforts at persuading him to make a selective display which would make the displays meaningful enough without being repetitively boring was of no avail. He would not even abandon or modify the unwieldy and unnecessarily deep and uncouth teakwood show-cases (it needed eight sturdy men to shift one of them from one place to another) that occupied a good deal of floor space. He also insisted on placing them against a wall, thus wasting a good stretch of wall space that could be otherwise conveniently used for the display of maps, blow-ups and charts instead. The table show-cases in this case were so low that visitors had to bend almost double over them, and a prolonged visit would be sure to reward them with a backache and fill them with naused and induce in them an eagerness to quickly terminate their visit and to depart as early as possible from such a back-breaking and painful experience. The university professor was very much tradition-oriented.

When upon a month-long visit to the British Museum in 1959, the author had to go through the same experience in the gallery of Indian archaeological collections, and could with difficulty read the small lettering of a nearly faded label and remonstrated with his friend, the Assistant Keeper, who was showing him round, he replied with typical aplomb, "Knowledge has to be acquired the hard way, you know". It was a sermon and a vain effort to camouflage an obvious defect, though the method conformed more to the traditional style, wherein the objects far outweighed the means employed to display them. The situation here seemed in retrospect, to have been contributed as much by curatorial inertia as by a characteristic love of tradition, if not perhaps also handicaps of resources.

These were characteristic of the days when the museum was very much a scholar's or connoisseur's preserve and not a public prerogative. The visitors in this concept did not belong to any of the now accepted four categories of museum-goers, namely, (a) children, including school children, (b) uneducated adults (particularly in the Indian context), (c) educated adults who are not specialists in any theme that the museum specialises in, and (d) specialists. Not much thought was given to the variable heights of the eye levels of the young and the old, and all others in between, of both the sexes, for either the levels of the cupboards or of the labels, or even of the paintings, charts, group- or room-labels or blow-ups, etc., were erratic. An enthusiastic collector of objects of maritime activity and their photographs living in Delhi is proud of the collection and is naturally fond of holding an annual exhibition of the same. The exhibits comprise mainly photographs and a handful of objects. The author was in one year asked to be present at the opening and to say a few words. The height at which the photographs were fixed was too much for him and he developed a neckache by the time he was halfway through the visit, and he asked in agony the ex-navyman if he wanted to induce spondylitis among his guests, or did not want children to see his magnificent collection. Though he did not give an answer, it was obvious that he was prompted to hang the photographs high so that the visitors did not indulge in the pursuit of their tectile instincts and ruin his precious collection with their enthusiastic finger-prints. He is an unmoved votary of tradition, out of the necessity to safeguard his objects from damage from the human hand.

The Natural History Museums in the earlier days showed their specimens either in bottles or show-cases, and little or no attempt was made to use any artificial means to show them off, not to speak of displaying them realistically and attractively.

One of the old-world methods of display has of course been the occasional use of dioramas, especially in the museums of anthropology or natural history. Such displays have been limitedly used in galleries of archaeology and anthropology as well. Well made dioramas based on sound research and a high standard of taxidermy and reproduction to a scale can be very effective indeed. But they are very expensive to make and difficult to maintain, and repairs easily show. For instance, the dioramas in existance in the Anthropological Gallery of the Indian Museum at Calcutta are all very well made and very impressive. They convey their message very tellingly indeed. They have strangely remained unaffected for over a decade.

As late as 1976 at a symposium on 'Museums as Educational Resources' held at Washington under the auspices of the Joint Museums Committee of the Indo-U.S. Sub-Commission on Education and Culture, the author ventured to raise a question on the future prospects of the "*diorama*" after seeing the construction in progress of a diorama on the Harappa civilization at the American Museum of Natural History at New York. The reply given by the representatives of the affluent West was that 'dioramas' were a thing of the past, in view first of the high cost of initial research, including the visit of the researching team to the far corners of the world for gathering accurate data, and the cost of services and materials for erecting dioramas, as well for maintaining them.

In the traditional displays, improperly prepared dioramas were often not convincing at all, and, often tended to be a children's show, and even they were not convinced. That they can be very convincing when properly prepared can be seen by anyone who visits the Natural History Museum at New Delhi or that put up by David Reuben with the help of indigenous materials at Ahmedabad at the small but exquisite museum set up alongside the Municipal Zoo. Use of modern materials like fibreglass and synthetic acrylic paint enables recreation of life-like dioramas at the hands of skilled experts. The use of such means at the Science Museums and the National Museum of Natural History shows how effective they can be.

With allround shortage of funds and increasing rise of costs of all materials and of living, it is indeed very difficult for old museums which are saddled with the traditional means and materials of display apart from an archaic building, to discard them altogether. Those which are somewhat better provided with funds may change over, gradually, if necessary, to modern methods of display in keeping with the change in the concept of museums. But those with poor resources may make do with their old materials, as best as they may, modify them as such as and whenever they may do so with the frustratingly limited resources in men and money at their disposal.

3. Towards Transformation of Traditional Display in Modern Times

Modern scientific discoveries have made it possible to introduce controlled conditions to temperature and relative humidity conducive to the preservation of museum materials, especially the organic objects and even to preserve stones and metals against the forces of deterioration. Similarly, the invention of fluroescent tubes have made it possible to intensify the illumination, and discard natural light with its far larger quantum of ultra-violet filters, or absorbents have helped man to call a halt to photochemical change that affects organic materials, especially coloured objects and textiles and paper, and have made it possible to adopt bolder methods—of functional and educative displays in modern museums with the help of modern techniques. The possibilities of air-conditioning and controlled fluorescent lighting have made it possible to discard large windows and obtain continuous stretches of wall space and utilize them for displays, or introduce movable partition walls to break up any gallery into suitable sizes and use them for separating different categories of objects or distinguishing divergent periods of styles or schools of art, as the case may be. The modern advances in techniques of photography, especially colour photography, and electronics have made it possible to recreate the environments of the original habitats or landscapes or monuments from which the objects on display are drawn. They serve as three-dimensional dioramas with sound light and life, and enable viewers to see the objects in their true context and perspective. For instance, the National Museum had planned to erect one of the sculptured and painted caves of Ajanta at the exhibition of Indian Art held at the Petit Palais in Paris in 1978. But as a French photographer had already prepared a large number of colour slides of the caves, the idea was conveyed at the exhibition by a device for continuous presentation of colour slides in combination. The material prepared by the National Museum was later erected in one of the galleries of the Museum itself as a temporary exhibition with telling effect. These blows-ups were borrowed from the Archaeological Survey of India. Likewise the use of large blow-up photographs of sharp focus helped create the realistic illusion of one of the gateways of the Sanchi *Stūpa* at the National Museum in 1980 with a realistic effect. The invention of synthetic acrylic paints have given rise to new dimensions in regard to background colours, specially when done on comparatively cheaper background material such as plywood boards, which now save the masonry walls from frequent changes of colour.

The invention of audio-visual aids or even auditory aids like the casette tapes has made it possible now to add a new dimension to presentation, with infinite scope for evaluation and modification of the presentation in the light of experience and visitor reaction, and make them communication-oriented, even for the blind.

The modern scientific methods of conservation have now made it possible to expose delicate objects to the hazards of public gaze with a sense of safety and security.

Modern methods of security comprising installation of burglar alarms, smoke detectors, metal detectors, remote controlled close-circuit T.V., wireless telephone, use of walkie talkie, and deeps, and devices for automatic closure of doors, have made it possible for museums to experiment with bold new methods and bring the objects very close to the viewer and not push him into another worldly distance. The outstanding exhibition of Bronzes of South India organised at National Museum in 1983 is a case in point.

If it is conceded that the museum movement in modern times began towards the end of the 18th century, it may be stated that during the first two centuries of museum activities, the emphasis was on collecting and storing and preserving as much as possible against the ravages of time with the available funds and knowledge of conservation. There was no recognition of the museum as an active institution of either formal and non-formal education during the first two centuries of its existence, nor any attempt in consequence were made for the orientation of the displays to any such purpose. The objects were made mostly to speak for themselves unaided by any other prop or means. It was only at the turn of the 19th century that the museums came to be increasingly recognised as institutions of education. The emphasis in displays also accordingly shifted from mere "preservation", which is an euphemism for storage, to "communication". And a new threshold was touched and new grounds were broken.

4. Conclusion

(a) *General*

We have already strayed in general terms into the territory of modern methods of display. It has happened because the dividing line between the traditional methods in the main and modern methods is very thin. It is the concept of the displays that calls the tune in regard to the choice of the theme and objects, the colour of the background, the size and environment of the exhibition room etc. If wishes were horses, beggars, would ride, in spite of the force of the adage 'where there is a will, there is a way', for financial resources would continue to be the greatest determinant force in all our undertakings. Whoever controls the purse strings in the final analysis determines what the museums shall achieve, and remains at the crux of the matter. Fortunately, however, the far greater exchange of ideas taking place now as a result of much commoner international travel, a broader based education, for greater communication of ideas by the media, and the efforts of the national associations of museum workers, and the International Council of Museums, and the more frequent organisation of exhibitions with modern methods of lighting and photography and coloured pictures, the modern man would no longer accept the dull, unattractive traditional displays. He would like to see spacious layouts, a balanced and integrated distribution of the objects, a pleasing but not distracting background, proper, adjustable and variable, but not too loud lighting, an aesthetically arranged display, a congenial museum atmosphere with a suggestion of integration with nature with the introduction of plants and flowers in the exhibition galleries, and adequate information on labels. He is far more conscious of what he wants than his counterpart was about half a century ago, and he is far more insistent in his demand as well. He is also far more conscious of his civic rights as a citizen and as a taxpayer. This augurs well for the future, and who knows what it has in store for us. The days of the traditional displays are over.

(b) *Principles of Presentation*

Evaluation of the museum exhibits, whether in traditional methods of display or under modern conditions have to take into account the following factors :

(i) the audience for whom it is meant;
(ii) theme around which the exhibits are built or placed;
(iii) the contents of the general as well as individual labels, to ensure that they are not excessive nor far too short, and that they exercise curiosity and create a craving for more information;
(iv) the size of the lettering to ensure that they are legible without imposing strain on the viewer, even from a reasonable distance;
(v) the height at which the objects are placed to ensure that they do not cause strain to the viewer of any age or sex aimed at;
(vi) the lighting is used that it does not affect the objects through the effects of photo-chemistry on the one hand nor cast reflections of shadows on the objects clearly;
(vii) the background colour of the walls so that is an unobtrusive as possible and at the same time brightens up the environment and does not cast shadows of any kind upon the object;
(viii) the quantum of objects displayed so that it is not too many to cause confusion or induce monotony on too few to dispel interest;
(ix) the quality of the objects so that it is both varied and attractive and that they are fully representative and sustain the interest of the viewers;
(x) the circulation on the course of viewing so that it is properly channelized without introducing sudden forays or repetitive movements; and that
(xi) the visit is aesthetically pleasing and academically rewarding.

If the displays broadly fulfil all these conditions, the display can be described as capable of achieving success. Thus selective thematic displays in moderation with adequate labels and adequately lighted galleries with ample light focused on the objects themselves which are the order of the day as against the demonstration display of an unconnected miscellany of diversities of the traditional order without any attempt at classification and segregation according to type material or period or at the presentation of their impact on human life or the technology, used to produce them. Modern displays in concept and execution are purposive, while traditional displays miss these essentials. The transformation has taken place as a result of the realization of the educative role of the museums for all and sundry, in fact for all categories of visitors grouped at the outset of this essay.

'Tradition dies hard', hence there may be in-built inertia against change among the older workers; but museological methods are keeping pace with the times. Though it may be time-consuming as well as the expensive to transform the traditional displays in vogue, the change is inevitable, as even the viewing public have become conscious of what they are looking for and would often call the tune and make the museums fall in line with modern thinking and exacting standards.

Numerous examples can be cited to prove that the handicaps of old-world antequated architecture can also be very well adapted to serve the purpose of modern museums by suitable modification. The British Museum in London and the Louvre in Paris are cases in point. The efficacy of such modifications is to suit modern requirements and is the only yardstick of the evaluation of utility of traditional archtecture for modern museums. Where there is a will there is a way and there are no insuperable barriers to adoptation of the otherwise unsuitable phenomena.

(c) *Evaluation of Presentation*

But what is far more important than the general principles of displays of presentation of museum objects is the effectiveness of the exhibits with reference to the basic or primary goal or message or communication with which in mind the exhibits are at all installed. This presupposes, what has now become a shibboleth, namely, that museums are educational institutions with immense object resources at their command. Nevertheless, museums are inherently different from purely educational institutions like the schools, colleges, universities or the technical institutes which have prescribed curricula and have to cater to audiences, who are all graded according to their age, qualification and capacity for grasping the subjects on which instruction is imparted by the teachers or on which they deliberately seek instruction. Museums cannot perhaps undertake to provide comprehensive education on any subject like formal education, but can provide substantial education to voluntary audiences, of all ages and interests in a non-formal way on a subject of his own choice, but not of the audience.

In a school or educational institution it is always possible to modify the teaching according to the requirements of grasping powers of the pupils (comparable to the audience or visitors in a museum), for there is a constant interaction between the teacher and the taught, questions and answers, and evaluation of the tasks performed in writing. There is thus a constant opportunity for considering one's deficiencies and improving the performances. But in a museum the voluntary audience is not bound to show up again if he is not impressed, influenced, affected or informed by the mute yet eloquent objects they see more or less fixed in their setting as fixtures. The setting up of a gallery of exhibits is an extremely expensive proposition and one has to be careful how one spends the money coming from public or private resources. The museum curator has, therefore, to make sure that his fixtures are effective and are appreciated by the visitors. There lie the germs of a dilemma. A museum is open to all and sundry, men, women, children, adolescents, the illiterate, well educated, ill educated, the deaf and dumb, the crippled, and some times the blind. A museum curator cannot shut off any gallery from any special category or categories of audience. He has thus a heterogenous audience to cater to, often with varying amounts of time at their disposal for viewing the museum. But a gallery once set up is almost a fixture and it is time-consuming and expensive to modify all of it, or even a part of it, to fulfil the needs of the different categories of audiences. What must he then do ? Scratch his head, shrug his shoulders and throw up his arms and give up in despair ? The answer is an emphatic 'no', for he too has a reasonable chance of suiting his exhibits to the needs of his audience at his choice through a process of the practical evaluation of his endeavours.

To the practical aspects of this work of evaluation we must now turn. As is well known the normal practice followed by museum curators, before setting up a gallery or even a thematic temporary exhibition, is to make a draft lay out plan, make an inventory of the objects he desires to be presented, prepare a draft design of a pedestal or a show-case (table or wall), and the kind of lighting he would use. He may often prepare a scale-model if the funds permit. He may take the help of professional designers for the purpose. He may try out blown up photographs of the objects and their effect by fixing them in the respective places. This is called the "formative stage" of the presentation. He may then proceed to evaluate the educative or communicative effect of the exhibits by holding a test at random of prospective viewers of the kind of audience at whom the exhibition is aimed by providing them with a short questionnaire. This evaluation is called the "formative evaluation". The questionnaire should be of two kinds, namely (a) a pretest questionnaire, the purpose of which is to find out how much of theme the visitor knows already; and another (b) a post-test questionnaire, required to be filled after the visitor goes through the mock-up of draft exhibition. The post-test evaluation is also often called the "summative exaluation" or a statistical analysis of the data on how much the visitor has imbibed. Thus the data collected would provide the curator with possible clues on the lacuna in all aspects of the exhibition. He may thereafter set himself so improving the display by various methods at his command.

The same tests may be held in respect of the permanent galleries also. But the scope for modifying or improving the gallery exhibits in the light of the evaluation data after the "summative evaluation" is limited. But the lessons learnt are important, for they can be used as guidelines for the future, if not also for the present.

But, the dilemma of the museum curator in regard to permanent gallery displays is in respect of the 'goal' or "objective" with reference to the objects on the one hand and the audience on the other. He can intend think up and fix up a theme after all, but must aim at the average educated adult steering clear of controversies bearing the general as well as specific requirements of all the categories of audience in mind and proceed with the installation after "formative evaluation", introducing such improvents as the 'summative evalution' may indicate and funds, time and resources in man power may permit. It goes without saying that museums must judiciously make use of all modern technologies for presentation to make it effective to the extent to which the resources of the museum permit. The curator may not make the specialists happy, but, if he succeeds in impressing the average adult visitor, he has a fair chance of measuring up to the requirements and expectations of the majority of his audience. He must remember that trying to please every body ends up in pleasing none.

Towards the purpose of collecting divergent views on evaluation processes and techniques a seminar devoted exclusively to the subject was held by the Museums Association of India in its annual session in 1983. The recommendations made by the All India Museums Conference held from 4—7 April, 1983 are reproduced below :

ALL INDIA MUSEUMS CONFERENCE

April 4—7, 1983

Recommendations

Having identified and discussed different purposes and functions of exhibitions in museums (such as research based exposition of information, educational communication, recreation, etc.) the seminar recognized the need for giving adequate attention to the multifarious stages and processes involved in planning and developing exhibitions. The present day emphasis on exhibition techniques and communication strategies was also recognized as the result of a change in the museum concept from a predominantly object-oriented approach to a communication-oriented one in keeping with their role in contemporary society.

The following recommendations are made as a result of the papers presented and the discussion that took place :

1. Exhibition in museums should be considered as one of the major public responsibilities and a communication tool for fulfilling the objectives of the institution.

2. The differences in approach with regard to the planning sequences involved in various kinds of museums, based on the materials to be handled, scope and limitations, etc., should be recognized, as also the fact that no single procedural format can be made uniformly applicable for all kinds of museums.

3. Notwithstanding the above some main facets/stages of exhibit development can be recommended as follows :

(i) Development of concept/theme/story.
(ii) Goals and objectives/intended public.
(iii) Objects/Exhibits Collection/Field Work Acquisition, Preservation/Conservation Fabrication.

(iv) Design Stages :

- (a) Gallery lay-outs/designs.
- (b) Individual exhibit designs or show-case design.
- (c) Perspective drawings.
- (d) Mock-ups/models/trials.
- (e) Lighting/colour shemes/aesthetics.
- (f) Use of audio-visual aids.
- (g) Labels and scripts.

(v) Evaluation strategies (to form part of earlier/formative stages also).
(vi) Final Installation.

4. While organizing exhibitions, whether temporary or permanent or loan, a tentative time-table may be worked out leaving sufficient time for attending to the multifarious tasks involved in exhibition preparation.

5. Research is an integral part of many of the above stages, particularly for developing appropriate themes and concepts, and for providing the necessary academic/scientific context.

6. Exhibit development should be a team-work involving curators, designers, exhibit preparators, educators and conservators.

7. The objective of the exhibition should be clearly established so that it would serve as a means of assessing the success or shortcomings of the exhibitions.

8. Evaluation may be considered an integral part of the entire process. Formative, continuing and summative evaluation may be incorporated wherever possible.

9. The tools and techniques for evaluation such as questionnaires, pre-tests, post-tests, interviews, observations, check-lists, etc., may be devised depend upon the objective and the visitors to be served.

10. Museum exhibition designers should take into account present day advances in communication.

11. Museums should also consider using interactive/participatory exhibits whenever possible, because of their distinct advantages.

12. Use of demonstrations of techniques, performances and various other media of communication such as play-acting, and puppetry may also be considered for adding to the communication effectiveness.

13. Adequate attention should be paid while designing exhibitions to the needs of handicapped visitors such as accessibility to all exhibition areas in a wheel-chair and blind and dumb.

14. Each exibition being a potential danger to the preservation of objects, it was felt that effective measures for their conservation be taken at all stages of exhibition, preparation, and, therefore, an exhibition-conservation specialist be associated with the organization of exhibitions.

10

Museums and the Festivals of India : The Search for a Rationale

A. Introduction

In recent years Government of India have taken seriously to organising grandiose shows of India's heritage in foreign countries. These have been given the appelation of "Festivals of India". Though the precise purpose of these celebrations has not been clearly brought out, it should not be difficult to imagine that these must have been designed to impress the foreign countries about the cultural, natural and scientific ethos of India. The objective, therefore, is presumably to enable the foreign countries to get to know the personality of India more intimately and in proper perspective. Promotion of tourism and trade are end products. In a larger context it cannot but be part of the total political game that the nations are now-a-days involved in playing with one another for the covert purpose of hitting political targets. Such festivals cannot, therefore, be described as altruistic undertakings, though they have indeed produced considerable impact, may be of an academic genre, and must have impressed the layman and the man in the street in a general sort of way. These are, therefore, the positive sides of the Herculean labours undertaken by the authorities.

In regard to the grandiloquent "Festival", celebrated in 1985-86 in the United States, *India Today* of June 15, 1985 wrote in an article entitled "Passage to the West" (p. 90). "They're calling it curry-colonialism. American is spiced out. Her galleries and museums are being invaded by *bodhisattavas*, bronze Harappan Chariots, dwarf *yaksas*, sinuous Sivas, gilded torsos of Vishnu and an assortment of erotic sculptures. There's more to come : Banarasi brocades, temple and court jewellery, *sun-baked* terracotta, women painters of Mithila, princely costumes, *biryani* and *rogan josh*, Ravi Shankar and Zubin Mehta, Tantra and Vedanta, Indrani Rahman and Kathakali, folk dancers and poetry readings. It is India's answer to America's blue jeans and hamburgers, hoola hoops and blue suede shoes, bubble gum and Donald Duck, Tarzan and little Lulu."

It goes on to add that this magnificent assemblage of India's heritage "promises to electrify Americans and American institutions into a radically changed awareness of India". According to S.K. Mishra, the Director General of the Festival, the celebration was expected as the article concedes "to signal a new era of Indo-American co-operation and exchange". Niranjan Desai, "The low-key Washington-based Minister Counsellor for Culture", "the immediate, concrete benefits for India will be in the areas of tourism, books, movies, investment and trade".

India Today continues (p. 91), "The festival is perhaps the most ambitious and aggressive *diplomatic initiative* ever attempted by India—or for that matter any other nation—in a foreign country."

The failings of our *Corps Diplomatique* in regard to the setting up of "a continuing India lobby capable of influencing American Government, opinion makers and the media in the direction of India's interests" have been bemoaned by the write-up in the following words : "Ambassadors and plenipotentiaries" have been seen (pp. 91-92) to "have come and gone creating miniscule furrows of influence in Washington".

Though a large number of journals and newspapers in the United States had brought out special effusive issues or articles on the occasion, the impact in American view is best summed up in the *USA Today*. It has called 1985 "unquestionably the year of India," and has predicted that the festival will produce a new "groundswell of interest in India" that will lead to the growth of Indian Fashions, Indian Food, the sale of Indian furniture in fancy department stores, Indian gift items, and travel to India".

What a climb-down from our exalted expectations !

B. Discordant Voices

Shri K.P. Unnikrishnan, however, raised a storm in Parliament by posing some searching and yet revealingly inconvenient questions about the Festival of India on the eve of its celebration in the United States. But the information offered by the then Hon'ble Minister of State for Culture, Shri K.P. Singh Deo, did not seem to satisfy the questioner. *The Telegraph* of Calcutta presented an expose of the issues in a long article entitled "Shrouded in Secrecy and Steeped in Controversy" in its issue of May 4, 1985, and drew the attention of the public to the many loose ends that remained to be tied up.

The apparent purpose of the magnificent and comprehensive festivals is indeed laudable though not often clearly spelt out. If, however, the Festivals are calculated to cultivate and deepen or even strengthen our diplomatic relationship with foreign countries, big or small, or even to mend our fences with them, as our ulterior motive, the pressing of our mute though potentially eloquent artistic and cultural or even scientific heritage, past and living into service for this purpose may be looked upon as admission of the indequacy of our diplomatic service in this regard. Or is it a normal supplement that is usually resorted to, by modern countries, though not much used in the past ?

The question of expenses involved, what with the cost of collection of the materials, conservation and documentation, packing and despatch and insurance etc., in a two-way traffic or even of fabricating the exibits as in the case of the Science Museums was not raised. The expenses which cannot but be a staggering figure may be to the tune of several crores of rupees. One wonders if a poor country with a nagging and whopping deficit budget and a heavy burden of debts can afford the escapable outlay ! Notwithstanding the usefulness of the "festival", this factor alone would seem to be counter-indicative, unless the festvial is considered indispensable for overriding considerations, which ought to be clearly spelt out by the authorities.

It is often observed that many of the items of exhibits are selected for the "Festival" at the direction of the experts of the receiving country for which they are intended. While the receiving country's points of view and preferences, if any, ought to be given due consideration and not held as obligatory, the choice should be left entirely to the experts of the country of origin on principle, because it is their prerogative and privilege as well as pride to interpret their own culture to foreign countries. Any slackening of this principle would be derogatory to the self-esteem of the country of origin, apart from being a slur on the knowledge and judgment of its experts.

A decision was taken then (in 1985) to despatch some of the (then) newly discovered Kushan sculptures from Sanghol (Punjab), to U.S.A. even before they had been adequately studied by their discoverer or by other Indian experts, not to speak of their being seen by the vast masses of the Indian populace. Nevertheless, it was comforting to observe that an excellent exhibition of Sanghol sculptures was organised at the National Museum, and an illustrated catalogue was also brought out in record time, in the fitness of things, before a few select pieces were shipped to U.S.A. Was the small representation abroad the result of the indignant outcry by the guardians of the nation's prestige ?

It would be desirable at all times to exclude outstanding pieces of sculptures or of any other category of art, calligraphy or historical document from the "festivals" in principle, for there is always a risk, howsoever minimal, of an air-mishap or ship-wreck, or an accident during transit. In fact, an outstanding 3rd-2nd century B.C. sculpture, of Yakshi from Didarganj, a prize possession of the Patna Museum, was found damaged on its return from the United States. It is not known where exactly and how the damage took place. There are several questions in this regard which do not seem to have been answered at least for the knowledge of the public. These questions that ought to occur to any inquisitive person are stated below :

(1) when and where was the damage first noticed ?
(2) who was the first to notice the damage ?
(3) what was the nature of the first report on the damage submitted to the authorities ?
(4) what action was taken on the basis of the report, if any, to fix the responsibility ?
(5) if any claim for compensation from the Insurance Company was made, and if so, with what result ?
(6) was the object unpacked in the presence of the lenders and their observations recorded on the spot ? If not, why not ?

The answers to these questions would indicate the deficiencies that may have led to the irreparable damage to a priceless piece of art, which could have been avoided.

There are other cases of loss as well, all of which are reprehensible in the extreme, and those connected with the events together with their overall supervisors should be made to account for all the lapses.

Years ago, way back in 1965, a cosignment of art exhibits (mostly sculptures in stone) which had done their rounds in the U.S.A., was returning to India by ship across the Pacific. The ship had touched Chittagong when India suddenly found herself at war with Pakistan. The entire consignment was off loaded at the harbour under suspicion, and one of them was opened up for examination, but when the alien authorities were sure of the contents the remaining packages were not fortunately touched. They remained, however, in the open, for several days, exposed to sun and rain. The late Dr. Grace Morley (an American), who was then the Director of the National Museum, and had been responsible for sending out the exhibition, went jittery in regard to the safety of the art objects which had been collected on loan from many agencies in India. The Director General of the Archaeological Survey of India was equally concerned. In course of time, after the war had ended, the consignment found its way to Calcutta, and news of its arrival reached New Delhi.

Government then deputed Dr. Morley and the author (then Dy. Director General, Archaeological Survey of India), to visit Calcutta and take steps to open up the packages in the presence of the original lenders or their representatives and return the packages to them on the spot to their satisfaction. The intactness of the consignment had first to be ensured by an inspection (by the author as the younger person) in the deep hold of the cargoship, and all the packages taken delivery of and brought to the premises of the Indian Museum. It was there that the packages were opened up, one by one, carefully examined jointly and photo-recorded. This task took three full days when both Mrs. Morley and the author stood their ground on their toes round the clock, and they heaved a sigh of relief, only when everything was found in order, after three days of grouelling labour.

This event is recounted here only to point to the responsibility that must be borne by the highest authorities responsible for despatching the exhibition. The author represented the Director General, Archaeological Survey of India.

Some fresh light has recently been thrown on the cause of damage to the Didarganj Yakshi in an article on "Passage to Russia" published in *The Illustarted Weekly of India* of July 18, 1987 by Anuradha Dutt. The article is based on an interview with Dr. L.P. Sihare, Director of the National Museum, New Delhi, and Mrs. Pupul Jayakar, Cultural Adviser to the Prime Minister.

Sihare is stated to have attributed the damage, which is minimised as no more than 1/10th of an inch, to deficiencies of packing and transportation. This is admittedly a recognition of the deficiencies which are relatable, in the ultimate analysis, to human individuals, and it is hoped that suitable deterrent action has already been taken.

It may be recalled in passing that Karl Khandalavala, the veteran doyen of Indian art historians had stated before the Yakshi's journey to U.S.A. in unequivocal terms that "it is nothing short of a *crime* to send a masterpiece like the Didarganj Yakshi—the only one of its kind in the country. One small crack and she will be ruined for ever." "Yakshi Damaged at Festival", *The Times of India*, September 12, 1986, p. 1, column 7. He was overruled at that time, and has been overruled again this time (in favour of the Yakshi's passage to Russia).

It is now understood that Government set up a committee to decide upon the list of objects, that may not at all be sent abroad for exhibition purposes on the grounds of their being extraordinary in quality or rare in occurrence or on other considerations. The Didarganj Yakshi seems to have escaped the exclusion, its quality, its delicacy, its damage, and rarity notwithstanding.

Mrs. Pupul Jayakar, however, supported the despatch of even quality pieces, and said "if China can send its great treasures, those terracotta horses which are very fragile and its great bronzes, if Egypt can send the Tutankhamen treasures, if Italy can send its Pieta, and France its Mona Lisa, India is not doing something strange and unheard of when it sends its sculptures". (See *Times of India* cited above)

There is no objection to sending sculptures for exhibition abroad, the caution is only about exposing our extraordinary pieces to risks of damage, destruction and loss and that too as frequently as we have been doing these days. The pros and cons of the proposition must also be examined in the context of the political gains which admittedly seems to be our main objective in celebrating the 'festivals of India' in foreign countries on ever increasing scales, and many other alterant factors in addition.

As regards the factor of expenditure involved we are told that the expenditure earlier incurred on the festivals in Britain, France and U.S.A. to the tune of Rs. 12 crores has been realized "many times over" (Jayakar in *The Illustrated Weekly*). One wishes that the arithmetic of the calculations had been detailed in justification. It is not likely that the rise of tourism, attributed to the exhibition, would alone account for the phenomenal profit. Furthermore, profits alone may not justify the risks to which the invaluable objects of our heritage would have to be exposed, howsoever careful the packing and transportation, unpacking, installation, dismantling and repacking and return journey and a longer chain of such events even through and after return to the primary base. If the system could indeed be made so fool-proof, why must we go in for insurance or indemnification against damage, loss, pilferage or destruction ?

It may further be noted that Rs. 16 crores are stated to have been allotted to the exhibitions in Soviet Russia and Rs. 31 crores for the return Soviet exhibition in India, making a total of Rs. 47 crores. We are not told if this amount is also expected to be realized many times over, and, if so, through what processes. Of course, this is a small amount and may even be written off. There is besides an element of exaggeration in these media circulated figures.

It is gratifying to observe that the need to hold such festivals for the benefit of the Indian people, in the larger interests of national integration, was realized by the authorities, which, therefore, organized the well known *Apna Utsav* last year. But the half-hearted approach that marked the celebrations led to its failure. Our immediate neighbours too, namely Pakistan, Nepal, Bangladesh, Burma, China, Bhutan and Sri Lanka, deserve a larger measure of attention in this regard, in the context of our holding festivals in the distant foreign countries, than they have received so far.

But the analyses of the most recent 'Festival', which is currently on in the U.S.S.R., seem to have thrown all pretences as under. *India Today* of July 31, 1987 has written in an article on "Festival of India/*Cultural Diplomacy*" (by Madhu Jain), "Gorbachev also succeeded in shooing away the dark cloud over Rajiv's political horizon" (p. 29). Aroon in the same issue, in an article entitled 'A Tiger Bear Hug' (p. 28) says "Their chumminess (That of Rajiv Gandhi and Mikhail Gorbachev) flew in the face of the well-known dictum of diplomacy that countries have no permanent friends, only permanent interests". Furthermore Gorbachev's statement, in a joint press conference after the inauguration of the Festival, that "everything" had beed discussed, meaning perhaps India's present internal problems also, has led to the debatable questions regarding "India's self-respect and sovereignty" having been compromised in the process. What if such intimacies were exchanged? The mediamen are apparently incorrigible with their ever widening yarns.

It is well known that political compulsions of a kind on both sides have drawn India and Soviet Union together, notwithstanding the Festival. The science and technology agreement signed on the occasion is the outcome of necessity on both sides. It is idle to speculate on how much was the contribution of the "Festival" *per se* towands this accord !

It may perhaps be hazarded in retrospect that other considerations of a mixed nature for outweighed cultural issues in this matter, though the two happenings were coincidental.

As regards the art—historical and museological facet of the "Festival", thanks to the so-called *bania-giri* invoked by our arch connoisseur, the National Museum Director, we learn that we are getting a Raphael, a Botticelli, a Titian and a Michael Angelo apiece, and some Kremlin jewels in exchange for our own masterpieces including the *cheekily* damaged Didarganj Yakshi. The works by the Renaissance masters from Italy would no doubt be good even for the gods to see. One wonders, however, how much a Botticelli, or a Raphael, or any Italian masterpiece of the Renaissance period for that matter would mean to the man in the street in India. We are often apt to overlook the elitist bias in our choice. If we could get the Kremlin jewels, we could as well have got some part of the exquisite Scythian gold from the Hermitage, Leningrad, as these have some links with our own moorings in the past. We could have asked for the exquisite *Babur Nama* from the Oriental Institute, Leningrad. Besides, one fails to understand why we could not get something genuinely Russian instead of the patently (non-Russian) Italian masterpieces! Is it because our conoisseurs feel that Russian works do not compare with those of Italians, or do the Russians, themselves suffer from a sense of inferiority complex and do not insist on presenting and pressing upon us their own achievements in the field ? Or do we ourselves undervalue the works of the Russian masters? Conversely what would the Russians in general think of our sending them (if we were to do so) some '*Pre-Columbian*' masterpieces from our National Museum Collection in exchange for their *Italian* loans ? Shall we then be promoting the Indian ethos through exotic works of art ? We do not know what, outside the domain of arts, we can offer to the Soviets in return for the generous loans or concessions. It is good, however, to know that the Soviets have, nevertheless, buckled under the relentless pressures of our negotiations and finally agreed to toe our line and have signed on the dotted lines. Is it not comforting to be told that the mighty giant bear has at last bent under the truculent tiger ?

C. Uses of the Festivals

One is not very sure of what exactly we may hope to gain in exchange for all the risks, expenses and botheration we go through for fitting out the "festivals". A pointed reference to our expectations and achievements out of these 'Festivals' has already been made in the previous lines under 'Introduction' to this Chapter with particular reference to celebrations in the U.S.A. Perhaps we hope to win the friendship of the countries to which we despatch our festivals, which may result in the institution of cultural exchange programmes, trade agreements, limited transfer of technology and a kind of friendship within the framework of our avowed policy of "Non-alignment". The last, in spite of its nuances, is rather difficult to achieve in the real sense of the term. The success of all friendships rests primarily on political or ideological friendship or interests. Under the circumstances it amounts to admitting that our "festivals" are aimed primarily at performing diplomatic work of a kind, which may be termed as "cultural diplomacy", and would appear, therefore, to be non-altruistic, as indicated earlier.

Our expectations under the circumstances are likely to end in frustration as the following examples will show. The Government of India had earlier sent a magnificent exhibition of Indian art on these "Manifestations of Siva" in 1982 to the U.S.A. In spite of the nobility of the theme, the magnificence of the conception and the excellence of the exposition, the vast populace of the U.S.A. remained apparently unaffected, or untouched, though it must have impressed and affected several thousands of the intellectuals and art lovers of the U.S.A., who were fortunate enough to be able to see the exhibition or participate in the academic discussions in the seminars held on the occasion.

One wonders if a realistic assessment of the results of the Festival of India in the U.S.A. was ever made. In effect it was perhaps no more than a passing ripple made by a sudden gust of wind over a calm pool of waters.

A "Festival of India" on a magnificent scale had been despatched to London a few years earlier, in 1981, ostensibly with the idea of reinforcing Britain's losing grasp of Indian culture and providing the present generation of Indian settlers in Britain with an opportunity to know their roots better, as indicated on the British side, not to speak of promoting India's own cultural interests through this extraordinary channel.

What a noble cause for an exhibition as made out by the receiving (requesting) side ! The idea was conceived of by a handful of art lovers in Britain. It was they who motivated the Art Council of Britain to sponsor an exhibition.

Once again any detailed assessment of the results does not appear to have been made. One may only presume from the trend of subsequent and contemporary events that the "Festival", in spite of all the hullaballu of the times, was no more than a passing show, barring the transient impressions made at the time the show was on.

Recently, Dileep Padgaonkar has laboured hard to make an assessment of the "Festival of India" held in France in 1985, in a signed article on "Franco-Indian Relations" on page 6 of the *Times of India* (New Delhi) of 9-6-1987. "Among the benefits that are stated to have accrued to India, from the festival, Padgaonkar has enumerated the following :

(i) a changed public perception about India (no longer as a country of hungry millions, snake charmers, rope-tricksters, etc.);

(ii) The realization that India is a country that is proud of its cultural and spiritual heritage even as she explores the frontiers of science and seeks to gain access to, and mastery over, the latest technological achievements;

(iii) a fresh interest in India (after the French had been obliged to give up their territories and rights over Pondicherry, Karaikkal, Mahe and Chandannagar) leading to a phenomenal rise of French tourists stated as "a record number" visiting India, in fact, "flocking to India," bringing no doubt considerable foreign exchange in their train;

(iv) the publication of several books on India (in fact, as many as eight were counted as displayed in the French bookshops);

(v) a growing popularity of Indian food (there being over forty Indian restaurants in Paris today);

(vi) a substantial increase in the number of French students studying Indian languages and those that have chosen south Asia as their area of specialization; and

(vii) the setting up of an Indo-French Centre for the Promotion of Advanced Research (IFCPAR) for co-ordinating the joint research programmes.

It is doubtful if all these were the benefits or outcome of the Festival of India. The French have evinced their interest in India ever since they first set sail for India or succeeded in ensconcing themselves on Indian territory, and this interest has remained alive for over two centuries. The benefits have indeed to be measured primarily in terms of the weight of economic and political ties, which are apparently not as strong as one would hope for. The IFCPAR was not the direct result of the "Festival of India", as claimed, for it is stated that the idea was mooted as far back as 1981, long before the "Festival" was held, during the times of Indira Gandhi. The 40 odd Indian restaurants in Paris could not have grown up during the last 2 years or less. It is no index of the Frenchman's friendship for India even as the more than 200 odd Indian restaurants in London alone are no yardstick of the average Englishman's fondness for India or Indians. The assessment attempted by Padgaonkar is clearly laboured and is comparable to the mountain producing the proverbial mouse. It provides no justification for the "Festival". It may be recalled that a major exhibition of Indian art was held in Paris in 1978 and it must also, therefore, be believed to have contributed, if at all, its mite towards 'the new climate, if the basis of the assessment were true'.

If the festivals "are all altruistic, why are we not holding them in the smaller and weaker countries or even among our neighbours with all of whom we are more directly concerned and connected culturally, spiritually, economically and politically, and with whom we have pressing necessity to live in peace and amity?" In regard to the benefits flowing from the earlier festivals in America, England and France, Mrs. Jayakar has spelt the following : (a) extraordinary media coverage, (b) rise of tourism, and (c) the recovery of the expenses "many times over" (*The Illustrated Weekly of India*, July 4, 1987).

D. Neglect of Basic Duties by Indian Museums

While most of the major *museums* of India, especially the National Museum, are now being worked round the year only in the cause of external exhibitions, to serve the needs of the "Festivals" their own basic work of documentation and cataloguing, not to speak of conservation of their holdings or other museological activities, remain largely or comparatively unattended. One would like to be told that even their primary task of documentation of all their holdings has been exemplarily completed, also in the National Museum, which has the plum or lion's share of the pudding of museological resources of every description in India today.

Even if a fraction of the moneys that are being lavished on the successive "exhibitions-cum-Festivals" were to be distributed judiciously to the Indian museums badly in need of resources for various purposes, especially the specific purpose of documentation and cataloguing, the avowed purpose of Government's own *Antiquities and Art Treasures Act*, 1972, would be promoted which otherwise remains in default. If the Government were also to defray the expenses of photographs of Antiquities in private profession, many more objects of value and antiquity would be registered and thus documents under the provisions of the Act than have been presented so far to the Registering Officers. The fact of the matter is that our documentation work is woefully in arrears as a result of our misplaced emphasis on external exhibitions and our anxiety to build up our image abroad. We seem to have forgotten the wisdom of the old adage "Charity begins at home". Little do we realize that we would not be in a position, on account of the deficiency of our documentation to take advantage of the *UNESCO Convention on the Means of Prohibiting and Preventing Illicit Import, Export and Transfer of Ownership of Cultural Property, 1970*. Even for this we need enormous funds some of which we seem to be bestowing on the Festivals. We shall also not be able to build up a satisfactory documentation centre of the nation's cultural property owing to the piteous inadequacy of the data colletced so far. This also puts Indian researchers considerably at a disadvantage. It is well known that no institution in India has the kind of documentation, though by no means complete, that has been laboriously built up in about 20 years by the American Institute of Indian Studies at Ramnagar (Varanasi), in spite of all their inherent advantages and possession of the materials. It is clearly the result of a topsy-turvy view of priorities and misplaced emphasis on our schemes of duties. We are also oblivious of the fact that our own (museum) "houses are not in order," and we are, therefore, not in a fit condition to undertake the onerous and nearly thankless task of organizing exhibitions abroad. That we manage to do so is at considerable sacrifice of our basic interests and priorities.

It must also be considered that such "Festivals" have become fashionable now and may be considered by many foreign nations as a "prestige issue". It would, therefore, be a continuous process, if reins are not pulled up in time out of sheer practical, considerations. If uncheked and unhalted, one country after another would be wanting or demanding, exhibits or "Festivals" in times to come in quick succession. They may be applying diplomatic pressures of a none-too-pleasant kind. And it would be difficult for the Government to resist the pressing demands, even when it comes from a comparatively small country like Surinam of Seychelles. The outstanding pieces of works of art would thus remain constantly exposed to continuous risks of many kinds for long years or in perpetuity. The resultant deprivation of the vast masses of Indians, including students, teachers, connoisseurs, researchers and scholars in general, besides art lovers, not to speak of the people in general, can be easily imagined. The museums, which would be obliged to give up their prize possessions for the sake of our external image for long periods, would thus be duller places to visit without their outstanding specimens for seemingly endless periods.

The National Museum, which has been entrusted with the task of organizing and co-ordinating these exhibitions abroad, have made it a practice to hold an exhibition of the outstanding pieces on their return to India at the National Museum itself for the benefit of the public in Delhi. This is indeed a laudable practice, but it is at the expense of the lenders who remain deprived of their possessions and showpieces, rather unfairly. If such exhibitions are to be held at all they should be done for short periods, say, of one month at the outside and with the prior approval of the owners, who must also own up their responsibility and answerability to the local public who have every right to see their favourable pieces in their own museums.

Would it not be much more desirable to hold such exhibitions as we are now holding in foreign countries in India instead, provided we can also spare the funds ? Exhibitions within the bounds of a nation help bring estranged people together and make them aware and proud of the masterly achievements of their common ancestors. They help thus to breathe and infuse a spirit of national integration which is the most crying need of the hour, what with un-national uprisings and riots disturbing the balance of mind and the sense of values in several parts of India today, not to speak of external forces against India's security and stability. This matter deserves the most serious consideration in the spirit of the adage "Charity begins at home".

F. Why not Exhibition of Holdings of Indian Objects in Foreign Countries ?

It is well known that many of the 8000 odd museums of U.S.A., and innumerable private individuals in that country have built up large collections of Indian art over the years. Most of these objects could have gone out of India only after Independence, for, earlier the communications and contacts between India and foreign countries other than Britain, France, Portugal and Holland were very limited. In fact, the first legal provision placing some kind of embargo upon the export of Indian antiquities was introduced by the *Antiquities Export* (*Control*) *Act* of April 1947, promulgated by the British Authorities only a few months before their departure from the Indian soil, as though in anticipation of the shape of things to come and in a frantic last minute solicitude for the retention of objects in the country of origin, after it had been drained enough. It was only after the 15th of August, 1947 that the floodgates of cultural exchanges and traffic of men with all parts of the world were thrown open. Objects of Indian antiquity also began to flow out first in a trickle and in a flood thereafter as a result also of considerable unacquaintance or inexperience of the Indian authorities with such a phenomenon. When matters came to a head, in 1965, the Government at last decided to act, and the result was the restrictive *Antiquities and Art Treasures Act*, 1972. India, however, was not the only country affected by the outflow of her cultural heritage in the wake of Independence, for the Unesco, which had by then been seized of the problem all over the world, especially as the undeveloped, underdeveloped and developing countries were being badly and systematically fleeced and affected in the process, had passed as early as 1970, a convention which is now well known as the *Unesco Convention on the Means of Prohibiting and Preventing Illicit Import, Export and Transfer of Ownership of Cultural Property* (1970). The significance and purpose of the convention are self-explanatory. But not all countries have signed the convention yet, and some powerful countries have done so conditionally.

One of the innumerable objects of cultural property that had left the shores of India over the years after Independence shot into lime light in 1972 when it was learnt from newspaper accounts that a magnificent bronze figure of Siva-Nataraja, of the 11th century, of Chola workmanship, which had been stolen from the Sivagurunathaswamy temple at Sivapuram in District Thanjavur, Tamil Nadu, in 1962, had bobbed up in the U.S.A., and had changed hands in New York for one million dollars. This is endemic of the illicit traffic in antiquities that has been going on ever since 1947. And it is not difficult to guess where the receiving ends lie.

It can be hazarded that if separate exhibitions of even a cross-section of the collections of Indian art were to be held in the different countries which have acquired such objects over the years, they would each make an impressive show, much more so perhaps than we can do by mustering our residual resources. One would only wish that the authorities would persuade the foreign countries to hold such exhibitions first before we send out our Festivals to them. These are very much likely to be eye-openers. Such exhibitions are also necessary to complete the documentation of Indian art in all the world for a comprehensive study of the Indian contribution to the history of the arts of the world in the academic sense.

It is also seen that in the exhibitions of Indian art held in recent times in the foreign countries, also with borrowed pieces from private owners, the lenders, in many cases, choose to remain anonymous! The reasons are obvious. In so far as the museums are concerned it should not be difficult to find out the date of their acquisition from their accession numbers which will provide a tell-tale evidence of the questionable phenomenon.

It is heartening, however, to know that all the exhibitions held recently as part of the "Festivals of India" have given rise to the publication of ample catalogues and monographs. They show the depth and width of the interest of the foreign scholars who have contributed substantially to these publications. These constitute substantial addition to the growing volume of literature on Indian art and culture.

G. Conclusion

In view of the facts and circumstances outlined above, it is felt that we ought to call an immediate moratorium (or temporary halt) to the scheme of "Festivals", which was set afloat a few years ago. Our priorities should aim at completing the basic documentation of all our holdings on open air sites, in temples, churches, mosques, *stūpas*, palaces and fortresses and in private houses as well as in all our museums. The imperative urgency of the task cannot be overemphasized. The undertaking of documentation of the objects in the museums is less difficult than in the other cases. But a time-bound and multi-pronged national programme for this primary task must first be worked out and implemented. When completed, the documented evidence must find place in a central archival point. The process can be considerably accelerated by the use of the modern technique of computerization. We must also seek and obtain complete documented inventories of diverse categories of Indian objects of arts and crafts now in the foreign countries, if necessary under Unesco's sponsorship, or bilateral programmes for this purpose. The documentation work should be followed by the preparation and publication of catalogues and monographs. Simultaneously we must systematically build up our own experts in different areas, and lay the foundation of a continuous process of building up such expertise, by providing also employment facilities. If this is not done on a national level and on basis of priority, very soon we shall have to be running to foreign countries and to foreign experts, who would soon steal a march over us, to learn about our own cultural heritage!

Till a substantial progress has been made, therefore, in the performance of the basic tasks, there should be a moratorium on exhibitions of Indian arts in *foreign countries*. Maybe the first phase of the task will run over the better part of the next ten years. Once our own house has been set in order and our financial position has become sound, we may resume the programme of exhibitions abroad, but at much longer intervals, say, of 10 years between two exhibitions at the rate of only one major exhibition or festival during the period of 10 years. The rationale for this suggestion may also be considered here. It is admitted on all hands that it takes nearly two years to plan an exhibition, one year or more to collect the materials, complete all the documentation, carry out required conservation and prepare the descriptive catalogues, which must be, for reasons of propriety, totally an Indian contribution, and pack and despatch the exhibits to their chosen destination. The fourth year will be for witnessing the holding of the "Festival", the fifth year will be for the return of the exhibits to the respective owners/parties. The process having to be repeated, the next exhibition on the massive scale can be ripe to be despatched only in the 9th or 10th year at the earliest. Thus is the background of the suggestion for one major exhibition in 10 years. This does not however, take into consideration the hassles of the return exhibitions of foreign arts etc. that will have to be organized in India. We may, however, account for and squeeze in two major exhibitions, one outgoing and the other incoming, in the span of 10 years. It may be possible to quicken the pace somewhat once the documentation work has been completed. We would, nevertheless, have a long wait ahead of us now.

The foregoing pages would seem to indicate that it was only objects of art, archaeology or anthropology which featured in the exhibitions of museum objects forming part of the "Festival". As is well known several facets of our life in India, including music, dance, drama, costumes, jewellery, cinema films, display of bear-antics, and acrobatics etc. have been represented and reflected in our "Festivals" abroad. Each facet has its own ethos and organizing agency, outside the museum system. The remarks and suggestions made above, primarily for the consideration of museums, would not, however, apply to the other aspects of Indian life though the general remarks about the rationale of and expectations from the "Festivals" would be applicable to them with equal force. They would also bear consideration in terms of logistics, economy and our capacity to foot the bill, regardless of the realization or otherwise of the basic objectives and even justification, though foreseeably fruitless endeavours in practical terms would always be deprecated.

In the area of museum activities, the vital role played by our Science Museums has so far not been discussed. The museums of science and technology, controlled by the National Council of Science Museums under the Department of Culture, Government of India, have done an excellent job in showing to the western world the Indian achievements of science and technology through the centuries of India's isolation and their periodic adaptation of Greek, Roman, Persian, Arabic and Western European attainments and indigenous achievements both in pre-Independence India and in Free India. The contributions of Aryabhatta, Varahamihira, Susruta, Charaka, C.V. Raman, S.N. Bose, M.N. Saha, U. Brahmachari, H.L. Khurana, Chandrasekhar, Jayant Narlikar and a host of other Indian scientists are known all over the world. The Science Museums in India are a class by themselves and have been attracting far more attention because of their ready and practical appeal than the museums of art and archaeology today. Their exhibits have had a far more direct effect on the western psyche than perhaps the art exhibits, for they speak a language that is of relevance to our lives today and indicate the high position of India in the field of science in spite of the active initial discouragement from the white man for the better part of their nearly 200 year-long hegemony.

These exhibits point to the far-reaching potentialities promised by the Indian men of science. There is indeed a justification and practical possibility of holding Festivals of Indian Science and Technology at greater frequency than has been suggested above for the arts festivals, provided of course we can afford the expenses. They do not have problems of security, conservation or safety or even plain documentation as the objects of arts have.

Regardless of any inhibitive factor mentioned or described above, if we were to stick to the principle of "work and not fruit being its own reward", we shall not have any expectations nor disappointments flowing from our labours of love. But can we really dissociate work from its fruits or perform any work without any expectations or objectives ? The choice of paying heed to the words of caution rests with the authorities. Years ago we had to go through an English text called 'Five Essays' by Dean Inge. A remarkable question quoted in one of the essays was posed thus : "Shall I tell you the harsh truth or soft falsehood ? Speak, for thine is the choice !" The author nonetheless would choose the first alternative for whatever it is worth.

11

Need for a Comprehensive Policy on Museums in India*

A. Preambles

The importance of museums as repositories of cultural, historical, scientific, technical, industrial or other kinds of materials for preservation against decay and degeneration and for transmission to posterity in a systematic manner as records of history, and for eventual utilization as an essenial and pre-eminent audio-visual means of education in general is being increasingly recognised by all. But there is as yet no clearly laid down national policy for the development of museums of every discipline in an integrated manner to serve as the basic guideline for growth and development.*

Though the matter is somewhat complicated by the inclusion of museums in the Seventh Schedule of the Costitution of India as a responsibility of the States, the difficulty is not insuperable. The constitutional provision does not preclude the Central Government from setting up museums under their own control and management according to requirement. What is needed, however, is co-ordination between the Centre and the States for the development of museums so that they grow on uniform lines, notwithstanding their regional or local individualities. But the crux of the problem is inadequacy of funds to match the demands for growth and development. The overall financial resources at our disposal cannot perhaps keep pace with the claims of the past human activities interacting with the gifts of nature and with the help of the growing volume of the knowledge of sciences in all their branches for the ever expanding evolution of technologies in our day-to-day lives, for the preservation and transmission of our legacies. Nevertheless, it cannot be denied that means must be found to collect and conserve as much as possible the tangible remains of human activities of diverse nature from the past, the present and the future. This is so because there cannot really be any dichotomy of the kind indicated above, for the past is the basis of and link with the present, which promptly recedes in its turn into the past, and becomes the basis of the so-called future, for the future also fleets backward into the past. Museums, therefore, help to define the personality of a nation on the basis of their legacies from the past and thus enable it to share the heritage in all their ramifications with a sense of pride and of equality with the other nations of the world. They, therefore, promote national integration on the one hand and international understanding on the other. The development of museums is, therefore, an important duty of the nation and it should be brought about by every means at our disposal. It is also necessary to set up a much larger number of museums than there are at present in every nook and corner, not merely for collection, storage and preservation of objects that are prone to decay and destruction but for the much larger and insistent purpose of the education of the masses.

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*The author in his capacity as Director of the National Museum (1976-1980) had submitted a working paper to the Department of Culture, Government of India on the subject as far back as October 1976.

It is needless to emphasize that the growth of museums in India during the last 175 years or so has taken place in a haphazard manner and by fits and starts but not as the result of the pursuit of an integrated policy. In view of the accredited importance of museums as educational-*cum*-cultural institutions and as safe repositories of our heritage it is high time that an integrated policy on the acceleration of the museum movement is worked out and implemented. This should also take into consideration the financial implications and the financial constraints of the States upon which have been laid the primary responsibility for the setting up, running and maintenance of museums, as financial difficulties, if not inadequate appreciation of the importance of museums in the life of a nation, often stand in the way of fulfilment of their statutory obligations.

B. Different Categories of Museums

The difficulties of an integrated growth of museums in any country are, in the practical area, accentuated by the differences of their disciplines and of the varying authorities which control them. Being of divergent disciplines, they function in mutually exclusive compartments. So the emphasis and the support that they may receive may not be of a uniform kind.

Thus, according to the nature of their holdings they may be broadly classified into the following categories : (a) Art and Archaeology, (b) Anthropology, (c) Science and Technology, (d) Commerce and Industry, (e) Crafts, (f) History, (g) Personalia, (h) Modern Art, each under a separate controlling agency, and (i) Multi-purpose museums, where several disciplines are combined under the same roof and are controlled and managed by the same authority.

According to the authorities which control the museums in India, they can be further sub-divided broadly into the following groups :

(a) Central Government Museums,
(b) State Government Museums,
(c) University Museums,
(d) Municipality Museums, and
(e) Private museums, controlled by trusts or individuals.

For the purposes of establishing proper co-ordination among the museums, which is necessary not merely for attaining uniformity or near-uniformity of museological standards but also for integrated development, for mutual co-operation for the achievement of their basic objective, the museums may be categorized, regardless the nature of their holdings, into the following classes :

(a) National Museums or museums of that status under the control of the Central Government, State Government, Universities or autonomous bodies;

(b) Regional Museums under the control of Central or State Governments, Universities, Municipalities or autonomous bodies; and

(c) Local Museums fostering local relies and interests under relevant authorities. These would encompass the archaeological site museums, most of which are under the control of the Archaeological Survey of India of the Central Government, or district, town, village, university, college, school or municipal and panchayat authorities, as the case may be.

The areas of activities of any discipline are increasingly large today, and the days of multi-purpose museum seem to be on the way out for the reason of the difficulties of balancing uniform development of each discipline, as the disciplines of the specialization of the heads of such institutions are likely to gain preference in all areas of activity of such institutions or in the course of equating the different disciplines each may get diluted. But owing to the paucity of materials available so far in respect of some disciplines it would still be desirable to maintain the multi-purpose character of some of the institutions that began in such fashion until they become unwieldy. The modern trend is positively towards unitary institutions, even in the matter of setting up national museums for the respective disciplines.

By design, planning and development the National Museum at New Delhi is placed at the apex of museums of this category though unlike the old provincial, or regional or State museums, it is shorn of all scientific and industrial sections, in the fitness of things. The National Museum may, therefore, retain its character as long as it may. At the moment it has the following departments :

(i) Prehistoric Archaeology, (ii) Historic Archaeology (with mainly sculptures, terracottas and bronzes), (iii) Numismatics and Epigraphy, (iv) Paintings, (v) Manuscripts (Arabic, Persian, Sanskrit and other Indian Languages), (vi) Arms and Armour, (vii) Decorative Arts and Textiles, (viii) Anthropology, (ix) Central Asian Antiquities, and (x) Western Art (Pre-Columbian).

While each of these departments should be developed on a national basis, it would be desirable to build up sections or departments of the art, archaeology and anthropology of West Asia, and South and East Asia, as none of these aspects would be fully representative if the collections were to be confined to the materials available within the territorial limits of India. It is needless to state that for a proper understanding of the cultural heritage of the country it would not do to exclude the immediately surrounding regions and adjoining countries. A beginning made now and conscientiously pursued may bear fruit after a decade or two.

Three other museums in India, namely, the Indian Museum at Calcutta, the Prince of Wales Museum at Bombay and the Salarjung Museum at Hyderabad have diversified holdings and have a national character. They also serve as regional museums of national status. The Government Museum at Madras is primarily an Art, Archaeology and Anthropological museum, but transcends the regional character. While the three museums mentioned earlier are autonomous institutions, the last is owned and maintained entirely by the State Government. All these museums have not merely come to stay they have played their role well as regional-*cum*-national museums, mainly in the disciplines of art, archaeology and anthropology. The Indian Museum has dubious or double control of the Botanical, Zoological and Geological Collections, which it shares with the Botanical, Zoological and Geological Surveys of India. Owing to an extent to lack of space, and to the persistence of double control of a very tenuous nature, coupled with the fact that the bias of the Indian Museum is in favour of art and archaeology, the dichotomy is obvious. The natural history departments are not merely antiquated in their presentation, they are static, with a Victorian personality. A logical solution would be separation of the natural history departments, and their coalescence into a single large museum of natural history under a unitary control. The authorities have for a long time adopted a policy of drift without any effort to look at things in their proper perspective and for arriving at a logical and viable solution of the problem of non-growth and non-development of these vital aspects of the national heritage. The initiative rests entirely with the Central Government which ought to be in a position to persuade the Board of Trustees and the Asiatic Society to see reason and decide accordingly in larger national interests. There is a readymade collection which may be pressed into service for large museum of natural history in Eastern India.

The residual part of the Indian Museum would then be in a position to develop to an optimum level as a regional national museum.

In recent times a National Museum of National History has been set up in New Delhi. It was to begin with under the control of the Department of Science and Technology and it is now under the Department of Environment. Within a short period after its inception this museum has been able to claim the limelight for itself as an outstanding institution of its kind with its telling displays and its role as a popular institution of education, which role it plays in collaboration with all the educational institutions, especially schools, in India. It has thus provided bold leadership in the area of natural history museums in the country. It should, therefore, be accorded the apex role in the area of natural history museums in India for purposes of planning, installation and development in an integrated manner just as the National Museum may enjoy this role, though somewhat restrictedly, in the area of Art and Archaeology Museums. The restrictive parenthesis is suggested because the other museums in this area are of a long-standing and if they have not been able to develop to the extent to which they could owing to several inhibitive factors, such as inadequacy of funds, inadequacy of opportunities for travel through India and even abroad for enhancing their knowledge and experience, which is freely provided by the Government to all categories of officials of the National Museum, and sometimes repetitively. The Central Government have an equal responsibility for all the museological institutions in India and their development should be on the basis of an equitable distribution of funds and opportunities. A tally of the opportunities provided to museum personnel of the different museums in India would indicate which way the winds blow, and where lies the bias of the authorities.

Similarly in the field of science and technology, the recently constituted National Council of Science Museums have stolen a march over all traditional museums through their extremely effective press-button and participatory presentation with working models fabricated by the Science and Technology museums themselves, as well as their attractive educational programmes. The system of mobile exhibitions in museo-bases, and dissemination of principles of science and technology and their uses in our day-to-day lives to a much larger public than the outreach of the static institutions was first introduced in India by the Science and Technology Museums. The others followed in their footsteps. In the areas of the museological methods for Science and Technology, the Science Museums are superior to most museums, and they need not be under the advisory or supervisory over-vision of any other museological institution howsoever elevated in rank. It may be noted that these museums are under the administrative control of the Department of Culture.

Likewise the Rail Transport Museum in New Delhi is a *de facto* museum of national status under the control of the Ministry of Railways.

The Crafts Museum in the Pragati Maidan at New Delhi is a likewise national museum in its class under the Handlooms and Handicrafts Corporation.

The Calico Museum of Textiles at Ahmedabad is a private museum, but is the only unitary museum of its kind and bids fare to enjoy a national status.

The Bharat Kala Bhavan of the Banaras Hindu University at Varanasi is an outstanding museum in its category of art, archaeology, textiles, epigraphy and numismatics and manuscripts and would bid fare to enjoy a national status owing to the richness and representative nature of its collections.

The Allahabad Museum which was until recently under the Municipality of Allahabad has been taken over by the Central Government primarily because of the relics it houses of the Nehru family, but has not yet been accorded national status.

Thus it is apparent that the national status of any museum is loosely understood and there is as yet no clear cut definition of a 'national museum'. That there can be several national museums in the same as well as divergent disciplines can be easily understood and should be conceded. It must also be conceded that one national museum may not lord over the others as otherwise there should be ground for dispute and controversies, which must be avoided at all costs.

The distinctive trait of the regional museums should be that they are to serve as the repositories of materials of diverse disciplines on a regional basis rather than on a national basis. They should be representative primarily of the regional profile of the nation's variegated heritage, and to an extent contain some selective specimens of the nation's heritage as well.

The regional museums should also be built with careful and deliberate planning instead of allowing them to grow in a haphazard way. The responsibility for this would rest with the national museums of varying disciplines which should take the regional museums under their wings, so that they may also partake of the character of national museums to be in a position to promote within their ambits national integration in the region. Though the territorial limits of such museums cannot be strictly laid down they may represent several contiguous states in any region, but, for practical purposes, it would be much more desirable to treat the state as the unit for making its collections.

The diagnostic character of a local museum would be its purely local character as it would specialize in materials typical of the locality, though this character cannot be absolutely unmixed. Accordingly the local museums can be further subdivided as (a) district museums, (b) town museums, (c) university museums in general, (d) college museums, (e) school museums, and (f) village museums. They would have to of necessity multi-disciplinary museums, some specializing in local history, some in local personalities, archaeology, crafts, flora and fauna, economic products, costumes, festivals and the like. These would also be museums of small size. The Archaeological Site Museums, whether maintained by Central or State Governments, may occasionally have an all India interest such as the Nalanda or Sarnath Museums or the Fort Museum at Madras, or the Tipu Sultan Museum at Srirangapatam, near Mysore, and would still belong to this category.

The development of museums in India on the above-mentioned three-tiered line of decentralization would to my mind alone give the museum movement the required impetus for a planned and systematic development. It is also clear to see that no one category of museums, even of the highest standard or status, can be vested with any kind of superior authority over all other museums for control or direction. There must, however, be a mechanism for co-ordination and for ensuring mutual help and collaboration. This mechanism can indeed be provided by the revived and revitalised Central Advisory Board of Museums. The implementation of the yearly programmes and developmental plans can, however, be supervised by a Standing Committee of representives of the major disciplines represented and reflected in our museums as well as of the Government or other departments controlling them. To this consideration we must now turn.

C. The Inter-relationship Between Different Categories of Museums and the Machinery for Co-ordination

The local museums are naturally to house materials of local importance or local finds and are generally to be supported and maintained by local authorities such as the Panchayats or other authorities without altering the local character of the holdings.

As the local museums mostly may not have ample funds and may not support adequate funds, they may have to be run on a part-time basis by voluntary or honorarium-paid staff. Such museums would have to depend on the co-operation in several ways on larger and more fortunately circumstanced museums, namely, the regional museums of the area. The regional museums can and should help them with technical advice, and guidance, loans or gifts of reserve specimens or even replicas and photographs (often blown up for exhibition purposes). Help may be given for guidance and collaboration in mounting exhibits and displays or organizing local exhibitions, providing proper labels, and in documentation and conservation, in larger national interests. Such help may also come not however as a matter of right, from the larger Central or State or even National Museums, whenever help is sought by the local museums, and whenever it is practicable to offer such help.

Such activities as (a) traditional methods of teaching in schools, (b) hunting, (c) fishing, (d) cultivation, (e) reaping and storing the harvest, (f) transportation, (g) animal husbandry, (h) smithy, (i) carpentry, (j) weaving, (k) knitting, (l) costumes, (m) festivities, (n) folk arts, (o) folk singing and dancing, (p) basketry, (q) pot making, (r) health and sanitation, (s) water supply and so on may be best presented and reflected in the local museums. This is so because aspects of life which have all but disappeared from the cities and towns are still available in the villages, or suburban areas.

Among the educational programmes of local museums the education of adults on children alike in local history, flora and fauna, local economy and industry etc. may be given a special position to instil knowledge as well as local pride.

The schools and colleges may be encouraged to build up museums in their premises for the purpose of appreciation and preservation of those aspects of our total heritage as may still be alive or available in the urban, suburban and rural areas. These may also house modelled specimens of sculptures, replicas of paintings etc. from the larger museums to promote awareness of our heritage and through it national integration.

The regional or central museums with larger resources in men and money may undertake to train the curatorial staff of the local museums in (a) curatorial methods, (b) documentation, and (c) exposition comprising visual presentation and audio-visual communication.

One of the inherent weaknesses of local museums is inadequate security arrangements, owing in a large measure to their paucity of funds and vulnerability of the comparatively less secure countryside where local museums are situated. This is an area which there is a strong case for filling the lacuna with subventions from the Central or or State Governments. The Central Government have already set aside a substantial amount for this purpose and set up a Museums Grants Committee towards this end. Security should receive high priority in its consideration alongside full documentation.

The maintenance of the museum buildings or their expansion or modification would form a major item of expenditure and therefore of subvention from governmental sources.

Normally it would *not* be within the competence of local authorities to handle or control archaeological explorations or excavation for augmenting their archaeological collections. This is so because archaeology is a concurrent subject under our Constitution but no exploration or excavation may be carried out without the prior approval of the Director General of the Archaeological Survey of India on the advice of the Central Advisory Board of Archaeology. Chance discoveries of any archaeological remains in the course of earthwork excavations or treasure trove finds must invariably be brought to the notice of the competent authorities under the provisions of the Ancient Monuments and Archaelogical Sites and Remains Act of 1958, and the Treasure Trove Act of 1878. These provisions must be borne in mind by all museums in general.

Though any system of effective or technical academic central or even regional control and supervision of museums in general, would be impractical because of divergent disciplines represented by them or diverse controlling authorities involved, it may indeed be possible to exercise some restraint on their activities and co-ordination for enforcing uniformity of standards through the Central Advisory Board of Museums as already indicated earlier. This body meets once a year and reviews the working of the museums in general and the National Museum and other museums under the administrative control of the Department of Culture in particular. It also considers and approves of policies in regard to museums as advisory measures. A small committee of the Board may be constituted for reviewing the activities of all categories of museums oftener, say once in 6 months, and report their findings to the Central Advisory Board, Central and State Governments or the University Grants Commission, as the case may be, for rectification of deficiencies, if any, as well as for the consideration of the Board at its annual meeting.

Even though the Advisory Board may not have any financial authority in the discharge of its duties, such a review as it can make, would tie all the museums in the country together, and help them to improve themselves on the lines of the Board's constructive suggestions. Leastways it provides the representatives of the museums with a forum on which to ventilate their grievances and highlight their difficulties for the consideration of the concerned authorities with a view to the adoption of appropriate remedial measures as far as they may be practicable. Such exposures as it can make of the conditions of the museums would themselves serve as spring-boards for effecting improvements. These would surely draw the attention of the authorities and the general public and may also attract their sympathy and support.

The envisaged co-ordination among the museums of all categories is necessary also in the light of the "Unesco Convention on the Means of Prohibiting and Preventing Illicit Import, Export and Transfer of Ownership of Cultural Property (1970)", particularly because the provisions of the Convention can be implemented by the Central Government only. All other museums must, of necessity, co-operate with the Central Government, especially as the antiquity or cultural heritage acts comprising the Ancient Monuments and Archaeological Sites and Remains Act, 1958, the Treasure Troves Act, 1978, the Antiquities and the Art Treasures Act, 1972, and the Wildlife Protection Act, 1972 are all interlinked and equally applicable to all individuals and institutions in India, especially in regard to illegal export of cultural property of any specified description.

Co-ordination is also generally necessary for mutual help and co-operation, especially in regard to the organization of exhibitions whether at home or abroad, such as the Festivals of India, which have become the order of the day, as well as for conservation on modern scientific lines or the fixation of values for purposes of insurance etc. It is also necessary for healthy and integrated growth and development of museums in India, besides the pursuit of uniform policies throughout India in regard to (a) the opening hours and closed holidays, (b) provision of facilities for research and photography to scholars in general, (c) holding exhibitions of cultural property in an integrated manner for the propagation of the knowledge of India's cultural, scientific and natural heritage for self-improvement as well as for national integration, (d) pursuit of educational programmes, which have common objectives, (e) arranging loans or exchanges of exhibits or objects, (f) exchange of information on the museological activities executed and methods adopted for the raising of standards all along the line so that uniformly high standards may be achieved in the preservation and presentation of the nation's heritage.

It is easily seen that the museums under the Central Government, especially the museums of national status, enjoy substantial financial allocations for all their activities. The same may not be stated in regard to the museums under the State Governments or the Universities, not to speak of the private museums. In order to assess the potentialities and prospects of all the museums in India and their actual requirement for optimum growth and maintenance a machinery has to be devised so that the great disparities in financial allocations of staff structures that exist today and that may lead only to a lopsided development of the museums in India may be rationalized. This is being stated because the authorities have been tapping and using, if not exploiting, all the museums of India for the purpose of holding the Festivals of India. Correspondingly they incur a responsibility towards all the museums of India. In fact, it must be recognized that all the existing museums and those that are yet to come into existence are like cells of a common body, and if particular cells alone are allowed at the expense of the others, the principal cells cannot but wilt and wither in the ultimate analysis. For instance, if the financial allocations of any one museum for the acquisition of 'art' objects run to the tune of Rs. 20 lakhs, or even more, while most have to rest content with a few thousands or less, the resultant disbalance in growth can be easily envisaged. Hence is is a more equitable distribution of funds called for, and the point cannot be over-emphasized.

Though the Central Government allocates funds to the State Government according to the established formula, they do not look into the routine or specific requirements nor into allocations for different departments. Notwithstanding the grants from a common pool of funds to each State, a special case has to be made for museums. Financial support, to a large extent, from the Centre would be particularly necessary for buildings to house the objects of cultural property properly, and for complete documentation as required under the provisions of the Antiquities and Art Treasures Act, 1972, and the Unesco Convention on the Means of Prohibiting and Preventing Illicit Import Export and Transfer of Ownership of Cultural Property This help is also generally required for publication, storage and displays and, most importantly, conservation, which last is a highly complicated process. The Central Government have already some provision for supporting the University Museums financially, even though they have their own source of support in the University Grants Commission. This system may, therefore, justifiably be extended to the State Governments also, on the basis of a countrywide assessment of their actual requirements, maybe only for the limited purposes outlined above. The States may also be persuaded to look at the problems more objectively in common national interests.

The National Museums of all disciplines may with advantage be made to serve also as a 'Clearing House' on behalf of the Central Government to offer 'loans or gifts' from their reserves to the other museums according to a phased plan of comprehensive development of museums in India. That may be desirable to prepare for the purpose assigning the task to a sub-committee of the Central Advisory Committee of Museums.

Sometimes the museums in general have obtained loans of archaeological objects from the Archaeological Survery of India. There is an element of '*ad hocism*' in the grants of these loans. Hence the suggestion for systematization with a view to overall development of museums in India. The objects of 'cultural property' that may thus be offered on loan should be on the basis of the priorities that may be fixed in the plan for a comprehensive development of museums in India that may be worked out by a broad-based national body of experts. But the actual dispensation towards the implementation of the plan should be entrusted to a committee of the Directors of National Museums and the Director General of the Archaeological Survey of India under the chairmanship of the seniormost officer among them.

In so far as the chemical conservation of the objects of cultural property housed in the regional and local museums is concerned, the State Governments may be encouraged and urged to set up fully equipped regional conservation laboratories for the purpose in each State, as there is pressing need for a chain of such laboratories in India as has been amply indicated elsewhere (Chapter 8). Recognizing that there is a dearth of conservation personnel in India arrangements for the training of the technical personnel can be made at the National Research Laboratory for the Conservation of Cultural Property at Lucknow, the Secience Branch of the Archaeological Survey of India at Dehra Dun, and the National Museum, New Delhi, besides deputing them for short periods to foreign centres as well for a wider experience. It has already been made clear in the Chapter on the "Training of the Curator" that there is plenty of scope for these institutions and many others to function on these lines for years to come. Besides, for the present and until a chain of conservation laboratories are established in the country, these more fortunately circumstanced laboratories should undertake to conserve objects of Cultural Property entrusted to them by any other institution in India who do not have such facilities as a matter of pressing national service.

D. The Role of the National Museum in the Museum Movement and the need of a Comprehensive Policy

(1) *Genesis and Purpose*

The first major step taken in comparatively recent years towards improving the condition of the museums in India was the sponsorship and publication by the Museums Association of India of a report on *The Museums of India* by S.J. Markham, Secretary of the Museums Association, London, and H. Hargreaves, formerly Director General of the Archaeological Survey of India, in 1936. Its recommendations were, however, advisory in character.

Among other matters the report recognized significantly the leading role of the Government of India in the development of museums in India in the words (p. 89), : "If, therefore, any real lasting improvement is to be effected it will fall to the Government of India to take the first steps".

It also recommended the appointment of an Inspector General of Museums in an advisory capacity and expressed the hope and belief that the State Governments would be willing and anxious to avail themselves of his expert services, as in the case of the Director General of the Archaeological Survey of India. It also made a plea for greater financial assistance from the Central Government to the States for the better (organized and administered) museums in the country.

The suggestion about the 'Inspector General' may have been appropriate at the time when art and archaeology dominated the museums, and acadenic specialization in art or archaeology and specialization in museology on the part of the Inspector General may have delivered the goods for a time. But with the expansion of the grounds covered by the museums today such a unitary concept no longer holds good. The Central Government have already appointed a Director General of the National Council of Science Museums in the fitness of things. The idea is valid because the museums of science and technology, in the States are yet to be built and the supreme direction as well as groundwork would inevitably flow from the Director General of the National Council of Science Museums for a long time to come.

Similarly there would be a case for appointing a Director General of Museum of Natural History, for the development of Natural Science Museums.

In course of time there would be justification, on grounds of parity, for creating such posts at the Centre for each major discipline. The resultant conflicts that would inevitably arise with the heads of the different academic surveys, which also run museums, will have to be reconciled. The Central Advisory Boards of Archaeology and Museums would, therefore, provide the proper for form bringing about reconciliation between conflicting interests and "egos" instead of vesting the Director General of Museums of the major disciplines with administrative powers for intervening in the working of the Departments or Surveys as the case may be.

The central authority will, therefore, have to weigh the 'pros' and 'cons' very carefully before taking any precipitate action in the matter.

Sir Leonard Woolley, who was commissioned by the Government of India in 1938 to review and report on the working of the Archaeological Survey of India, covered also the subject of 'museums' in general under 'General Points' in his report (1939). He recommended that "Delhi ought to possess a National Museum" (p. 32 of the Report) and that "it must be accessible to the general public for purposes of instruction". The idea itself was not new, nor mooted for the first time. Nevertheless, it carried considerable weight with the authorities as it came from such an internationally known and respected authority.

The war years intervened, and it was not until September 1945 that an interdepartmental meeting of the Government of India accepted in principle that a Central National Museum of Art, Archaeology and Anthropology ought to be established in India and that Delhi should house it. The Committee appointed thereafter by the Government under the Chairmanship of the late Sir Maurice Gwyer, then Vice-Chancellor of the Delhi University, went into the details and completed its report in 1946. The committee recommended that the National Museum should comprise five Departments, namely, (i) Arts, (ii) Prehistoric Archaeology, (iii) Historic Archaeology, (iv) Numismatics and Epigraphy, and (v) Anthropology, besides (vi) a Circulating Department, (vii) a Library, and (viii) a Chemical Laboratory.

Special emphasis was laid by the committee on the role of the Librarian in guiding research which inevitably would be at the base of all its museological endeavours and enterprises. By implication it had intended to accord a higher status for him in the hierarchy of the National Museum. That the academic and interpretative aspects of a museum's work are more important than the methodological was clearly recognized. It is true that methodology cannot be ignored or neglected, though it has to remain subordinate to the aspects of exposition.

The Committee also stressed the role and importance of a Circulating Department, "which, by preparing and sending out classified loan collections to towns and educational institutions throughout India, can fill a long-felt educational need" on the model of the Circulating Department of the Victoria and Albert Museum, London. Strangely, this recommendation of the Committee has fallen into oblivion and instead of educating the Indian populace we have pressed into service our museums to educating the world through our "Festivals".

The National Museum came to be established in 1949 and was finally installed in its present building in December 1960. In course of time several other Departments came to be added, namely, (i) Decorative Arts and Textiles, (ii) Manuscripts, (iii) Arms and Armour, (iv) Central Asian Antiquities, and (v) Western Arts including a core collection of Pre-Columbian Art. The development of the National Museum has not also fully followed the guidelines laid down by the Gwyer Committee. Nevertheless, it has come to the forefront of the museum movement *in its own chosen fields* by virtue of its present position as the largest museum of its kind in the subcontinent, and also because it covers a very large segment of the art and culture of India which no other single multipurpose museum in India can rival. Even though history, art and culture which form the backbone of a nation's personality, they cannot take precedence over science and technology and natural history, for, they in their turn be at the base of art, history and culture. They are, therefore, mutually interdependent and complementary elements of a nation's total personality. This situation lands us in a dilemma, for though the National Museum has a vital role to play, in its limited areas of specialization, in the present and future phases of the museum movement in India it cannot, in propriety, claim or be accorded precedence over the National Museums by other major disciplines. In fact, it is a misnomer to call it the National Museum (of India) for it does not and cannot in sheer terms of logistics or feasibility represent all aspects and facets of the nation's heritage. It may be necessary to redesignate it as the National Museum of Art and Archaeology, for its Anthropological Department (with facets of arts and crafts) cannot supervene the National Museum of Man, as planned and envisaged by the authorities.

(ii) *Circulation Department*

The idea of the circulating Department envisaged and proposed by the Gwyer Committee should be given a concrete shape in view of the importance of the matter in dissemination of education and promotion of national integration. The creation of an Exhibition Cell headed by an officer of the rank of Asstt. Director has given rise to its nucleus, though presently it has been doing work for the citizens of the world outside India. Such cells would be needed for the other disciplines also, so that their normal work is not disrupted by whole time involvement in works connected with the 'Festivals'.

(iii) *Departments of Extra Indian Art*

The National Museum (of Art and Archaeology) ought to build up well-defined sections of extra-Indian art and archaeology as well. This development must be confined to this single institution for proper growth, to begin with. A humble beginning has already been made, in the fitness of things with a Department of Western Art, which is presently dominated by a core collection of Pre-Columbian Art.

As the culture of one region is intimately linked with and influenced, to a small or large extent, by the cultures of the regions surrounding it, the areas of our interest would, therefore, encompass the whole of Central Asia, Afghanistan, Tibet, Pakistan, Nepal, China, Bangla Desh, Burma and Sri Lanka in the immediate neighbourhood, Turkey, Iran and Iraq, Lebanon and all the Arabic countries and Palestine and Israel in West Asia. Egypt in Africa, Greece and Rome (Italy) in Europe, Thailand, Cambodia, Laos, Vietnam, Malaysia, and Indonesia in South-east Asia, Korea and Japan in East Asia. The study of the history, culture and art of these countries is absolutely essential for the better understanding of our own culture with all the two-way traffic of cultural traits among all the countries. These could be broadly subdivided into three Departments of Central Asia, Western Asia, and South and South-east Asia, respectively. The same criteria with wider expanses on a global scale would be equally applicable to the disciplines of Anthropology, Science and Technology and Natural History as well.

Materials of all kinds from all these regions can, however, be obtained only by exchanges or by purchase at public auctions. These purchases for cultural materials may also be prohibitively expensive, often beyond our means. They may also give rise to misunderstanding with the third countries, of origin of the materials. Under the circumstances direct exchanges with the countries of origin will be the best means of augmenting our collections of extra-Indian materials. For this purpose, therefore, we have to build up exchangeable reserves of our own materials at a rapid pace by conscious and persistent endeavour. A small beginning now may begin to yield dividends a decade or two later. But the effort will be entirely worthwhile.

For this purpose, therefore, it would be necessary to frame a national policy of exchanges with foreign countries so that we may gradually build up our foreign sections. These exchanges would be possible with those countries which have reserves of materials in our lines of interest and are interested in our materials in exchange. For purchases, which may have to be restored to now and then, large or even enormous financial provisions would be necessary, especially if they have to be undertaken at the great art auctions of the world.

(iv) *Training in Extra-India areas of knowledge*

At the same time it would be necessary to build up Indian expertise of the highest order in the different fields of interest. This can be done by sending out Indian experts or trainees for study or research in foreign museums under schemes of scholarship or cultural exchange programmes. The scholarships offered by foreign countries should be channelised to promote this objective. Persons already in employment should be given preference and they must also be assured of opportunities of utilizing their knowledge fruitfully in the institution which may be chosen for this purpose.

This is being suggested because under Indian conditions the pursuit of knowledge for its own sake is a rare phenomenon now-a-days. It must, therefore, be linked to an assured means of livelihood. The attractions of academic careers are losing ground for a person's status in society is dependent not upon his knowledge or scholarship but upon his bank balance. Furthermore, the majority of those who opt for the academic professions these days are from among those who have exhausted other more paying avenues of employment offering higher social status. The writing on the wall can be seen by all but the blind or purblind. Yet we find that several foreign countries are sponsoring young scholars to promote scholarship of various facets of Indian culture and history and within a few years the youngster beginners are rising to the specialist's status. Conversely we do not find any planned sponsorship of Indian scholarship on any subject, Indian or exotic.

It should, however, be possible to introduce schemes of intensive training of promising young scholars in different branches of extra-Indian history, art, archaeology and anthropology, flora and fauna and geology etc. with the specific purpose of building up expertise among the Indians. The National Museums of respective disciplines would be the ideal institutions for the realization of this objective. In fact, a School or Museum, may be set up at any Central museological institution for this purpose. To begin with the course should be confined to those in service to begin with so that problems of unemployment may not hamper the endeavours. The growth of extra-Indian objects and of expertise would in due course lead to the generation of employment potential.

With the growth of more museums and the coming up of museums in the universities, persons outside the services may also be considered for training.

The rationale of the proposal arises from the fact that the existing courses of museology at Aligarh, Baroda, Bhopal, Calcutta, Pilani and Varanasi are not all under ideal conditions as the training centres are not either associated with any museum at all, or not associated with ideal museums, and the courses do not cover expertise in branches of non-Indian facets of human life or of nature.

We should, in course of time, be in a position to build up Indian scholars in non-Indian fields which have not attracted Indians so far. This process can be accentuated and sustained by the introduction of branches of studies of these categories of objects and life in some of the universities. A beginning may be made in one or two selected centres such as the Jawaharlal Nehru University in Delhi, Benaras Hindu University in Varanasi, and the Vishwabharati in Santiniketan. This process can be sustained and accentuated by the institution of scholarships in each branch of study for carrying out practical work in museums under the guidance of one or other of the museum officers. This would also mean that the trained personnel of such museums who would be imparting instructions to trainees would be recognized by the universities as teachers, and in course of time some of the museological institutions should be recognised as affiliated to the universities as collaterals or deemed to be universities, also for purpose of research. Such a development would enable the museums to play their roles fully in the museum movement, especially as educators at the university level.

(v) *Importance and Urgency of Documentation*

One of the major drawbacks of the museums of India in general is the non-completion of documentation of their holdings. Though in most cases the accession registers may be complete, the Classified Accession Register under the heads of (a) object (identification), (b) material, (c) dimensions, (d) chronology, (e) style, (f) provenance, etc., and (g) the photographic documentation, not to speak of index cards bearing similar details, are far from complete, though the latter should form the most handy documents for the ready reference of all concerned. While this aspect of a museum's job would claim the highest priority both for study as well as record for purposes of security, also in terms of the Antiquities and Art Treasures Act, 1972, and the Unesco Convention on the Means of Prohibiting and Preventing Illicit Import, Export and Transfer of Ownership of Cultural Property (1970), the lack of documentation remains a serious lacunae in practically all the museums, not excluding the National Museum. In fact, while the Government is forcing the public to document and register their objects, the museums are being exempted, possibly on grounds of inadequacy of funds, personnel and equipments. The authorities empowered and entrusted to enforce any law or rule must first themselves set the example. That the matter needs an objective assessment of the museums' total requirements in men, money and equipment and provision of means to fulfil the legal obligations need not be over-emphasized. The matter must also be given the highest priority in all the museums in India, and all the bottlenecks removed for the furtherance of the objectives. The matter may also be featured in their annual reports for the consideration of the Central Advisory Board of Museums, so that Government may be kept apprised of the progress of documentation of the nation's heritage properly. Perhaps even legal sanction may be obtained for enforcing the completion of documentation of the existing holdings by a stipulated date, considering the volume of arrears in each case, and also in respect of fresh acquisitions within a stipulated time after acquisition.

Incidentally, it may be stressed that the documentation archives built up by the Archaeological Survey of India under the provisions of the Antiquities and Art Treasures Act through the provisions for registration of antiquities should also be subjected to classification and indexing. The index cards should be thrown open to the scholars for research purposes, if necessary, by adding to the staff strength of the Archaeological Survey of India or through research scholars engaged for the purpose.

E. Conclusion

It is recognized that museums play an important role in the preservation of a nation's heritage of history, art, culture, flora and fauna, scientific achievements and industrial development and in the propagation and transmission thereof to the current and prospective generations through their educative measures. The museums must, therefore, be developed extensively and purposively to enable them to achieve the basic objectives adequately.

Since it is not possible to promote or sustain and control such a multi-faceted movement from a single source, the process can be accelerated by encouraging decentralised growth, throuh a three-tier system of Central, regional and local museums each with well defined objectives and scope to serve the respective sphere of influence and area of interest. Though it would not be possible to put them all under one unified system of administration, for reasons already enumerated and elaborated earlier, the needed co-operation and co-ordination among them all may be brought about by making them party to a common plan for development through the intermediary of the Central Advisory Board of Museology.

By virtue of the scope and position the Central museums of national status of each discipline will naturally at the apex of the envisaged pyramidal structure of the museums in India, from which most of the technical and museological directions for the respective disciplines would flow to the others. The local museums would constitute the base of the structure.

The Central Government on the national plane has a special responsibility to sustain the movement through (a) financial subventions, (b) advisory service, (c) technical help in documentation and conservation, (d) promoting growth through loans, gifts or exchanges of objects, (e) organization of circulating exhibitions for promotion of national integration, and (f) ensuring uniformity of standards through the training of personnel at all levels. The responsibility of the Central Government in these directions is also indicated by the provisions of the Unesco Convention on the Means of Prohibiting and Preventing Illicit Import, Export and Transfer of Ownership of Cultural Property, the Antiquities and Art Treasures Act, 1972.

As national institutions, the national museums have to build up in course of time, sooner rather than later, extra-Indian Departments in every discipline, making a beginning with the adjoining countries of Asia on the basis of a well laid-out policy.

A diploma course in Museology may be instituted in the national museums providing for the development of Indian expertise in diverse areas of specialization. The ideal place would be Delhi where there are several national museums, and a regional museum of science and technology is coming up. This centre that may be called a School of Museology can be set up either at the National Museum (of Art, Archaeology and Anthropology), or at the National Museum of Natural History, and it can enlist the co-operation of all other national institutions for imparting training and practical instructions.

To ensure the continuity of teaching at the universities of non-Indian phenomenon adequate facilities will have to be provided, and these would give rise to scope for research as well as for employmeut.*

F. Suggested Models for the Development of Museums

(i) *General*

In consideration of the fact that it would be difficult fully to decentralise the museum movement or on the contrary to control it from a single source, for reasons detailed above, the development of the museums should be allowed to take place independently with such measure of co-ordination as may be enforced by an appeal to goodwill as well as through control of the purse as also the authority of the Central Advisory Board of Archaeology. It is towards this end that certain models are suggested below. This is based on the hopeful presumption that the museums would grow in a three-tier system in co-ordination with the national museums of the respective discipline at the apex, the regional museums at the intermediate levels and the smaller town or village museums in each discipline or as multi-disciplinary museums at the lowest level.

On the ground of paucity of funds as well as of inadequacy of technically qualified personnel for the purpose, especially, of the conservation of museum objects, and inadequacy as well of dissemination of knowledge about them among the public of varying educational background, all the museums cannot be built up on the same pattern nor perhaps can they have the same quality or quantity of equipments. Nor can be number of museums be increased subtantially all at once. It is presumed, however, that the Central or State Governments would be principal sources of financial support for all the museums in the country. Of course there are exceptions. The business house of the Birlas have set up museums at Bhopal, Hyderabad and Calcutta. There are private museums like the Raja Kelkar Museum at Pune, the Palace Museums at Baroda and Jaipur, etc., Arthopoda Museum at Pune, the Calico Museum at Ahmedabad, and the International Dolls Museums at New Delhi. Examples may be multiple. They may not all or at all agree to conform to the pattern formulated here and may be interested in maintaining their independence and autonomy.

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*These ideas were conveyed by the author in his presidential address at the annual general conference of the Museums Association of India held at Bangalore in December 1977 under the caption "The Museums in India To-day—Need for Integrated Development."

The National or Central Museums at the apex should have facilities for imparting in-service refresher training in (a) museology in general, (b) conservation of museum objects, (c) appreciation of extra-Indian art, culture, history, flora and fauna and scientific and technical achievements, (d) guide service, (e) museum displays, (f) preparation of reproductions, and (g) running educational programmes.

The National or Central Museums should also be in a position to build up the collections in the State and local museums with loans and gifts from its own collections, if not also by exchange. Generally speaking the National or Central Museums should also be in a position financially as well as in terms of manpower to help the other museums with advice, if sought, or active help in the setting up of galleries or even, to the extent possible, in the conservation of objects requiring immediate attention.

There cannot, however, be any legal or administrative compulsion for enforcing co-ordination, which can be at best voluntary, and there may only be a provision for providing help to the smaller museums when help is sought.

The museums at intermediate levels, which may also be called as the regional museums, would be in a better position directly to help the local or smaller museums and should be looked by the latter as the focal points for a healthy and integrated development of the museum movement in the country. They may serve as a means of technical and professional liaison the national museums on the one hand and the local museums on the other. As museums are a State subject under our Constitution the enforcement of such co-ordination is within the jurisdiction of the State Governments.

(ii) *The suggested pattern of models for the development of different categories of museums*

In framing the tentative models the two basic duties of any museum, namely, (i) preservation of its holdings; and (ii) utilization of its materials for the purpose of transmission of education have been borne in mind. As the museums have a very direct role to play as institutions of education so vital a means of nation building and national integration, in the larger context of the development of the nation, they have to be built up with care. The optimum standards may, therefore, follow the norms adopted by the Central Government in regard to staff structure and scale of pay.

(a) The Local Museums

It may not be possible to build up museums fresh at every town or village, but the local institutions in the form of the schools or panchayats may be utilised as the nuclei of small museums in the countryside. In the beginning these small museums may not require specific staff for the purpose of the maintenance of the museums, but can be looked after by the members of the panchayat under the control of the Chairman, or by the members of the teaching staff under the control of the headmaster.

Perhaps one or two extra watchmen may be required for keeping watch when collections grow to sufficient importance. Both in the cases of the Panchayat Museums and the School Museums the help of the Drawing Master as well as the students can be obtained from preparing labels, charts, maps. The students and staff can take turns to explain to the visitors the objects put on display, for any museum to fulfil its purpose and to qualify for being called a museum must be open to the public. As regards the watch and ward work, the village watchman, already deployed for the *Panchayatghar* and/or the school may also look after the safety of the museum objects.

These museums can be made as the nuclei for collecting materials of local history, geology, botany, folk arts, traditions, local for which some villages may still be famous, besides other materials of local importance. These can also be supplemented by replicas of works of art collected from either the related regional or State museums or the Central museum.

In course of time the village community may be made aware of the value of the objects reflecting on the glory of the village. The village community may then be enthused to serve solidly as an additional safeguard of the local heritage. When such museums come to stay with the passage of time and the growth of the museum movement they should aim at having the following pattern of staff :

1. Curator	—1
2. Guide Lecturer	—1
3. Photographer	—1
4. Watchmen	—3

The actual financial implications would encompass the following heads :

(i) Salaries;
(ii) Contingencies for :
    (a) office expenses,
    (b) documentation,
    (c) permanent displays,
    (d) temporary exhibitions,
    (e) conservation of objects;
(iii) Construction of building;
(iv) Maintenance and improvements or additions to the building.

In this context, it has to be remembered that the security of the village museums, which will depend in part on the nature of the building, will have to be very strong as they are likely to be more vulnerable than museums in cities or towns to thefts and burglary, in view of the high prices that the objects of India's cultural and natural heritage fetch outside the country.

(b) Town Museums

Eventually the aim should be to build up a museum in every town so that these museums may serve the needs of the community in the townships as well as the schools situated within their areas. While this may indeed be the ideal, it may not be possible in the present context, to build up a museum in every town. It should, however, be aimed to have a museum at least at each district headquarters of multi-disciplinary nature to contain objects of local, cultural and natural heritage in all the disciplines possible. Such museums must each have a sizeable library. It will help the curators to collect as much information as possible in regard to the objects under their charge so that they may also satisfy the curiosity of the visitors. The visitors themselves may be permitted to consult the library so that on their own they may make effort to understand the objects on display and appreciate them all the better. It may also be possible as a preliminary measure to use the district libraries, wherever they exist, as the incipient district museum to begin with. The services of the employees of the library can in that case be stretched to look after the museum also. In course of time such a development would bring together different categories of objects in the museum and these may generate both the demand as well the means for the expansion of the incipient museum into a full-fledged museum in its own right. Thus will the people be involved at the grassroots level and they would add momentum to the movement for collecting and preserving objects of our cultural and natural heritage and for using them for the promotion of education in general.

When the District Museums have come into their own they will require a formal coterie of staff to sustain it and it should consist of the following categories of personnel :

1. Curator —1
2. Asstt. Librarian —1
3. Preservation Assistant —1
4. Laboratory Attendant —1
5. Storekeeper-*cum*-Clerk —1
6. Photographer —1
7. Watchmen —3

The financial allocations would encompass the following heads :

(i) Salaries,
(ii) Contingencies for running the office, library, laboratory and documentation,
(iii) Acquisition of objects,
(iv) Permanent displays and temporary exhibitions,

(v) Educational activities,
(vi) Construction of the museum building.

(c) State or Regional Museums

The headquarters of each State should have a State Museum which will naturally enjoy an intermediary and regional status. It should be in a position to integrate the museum movement within its jurisdiction, i.e., the extent of the state, and render such help as the smaller museums situated in the area may stand in need of in various ways. Most States have already a Central museum at the State level as well as a network of smaller museums under its administrative control. But an ideal regional museum should have the following component of Staff to enable it to look after the diverse aspects of its duties which should include the integrated development of all smaller museums in the area.

1. Director —1
2. Asstt. Director —1
3. Senior Curator —1
4. Associate Curator for each department —1
5. Security Officer —1
6. Security Attendants —2
7. Guide Lecturers —2
8. Publication Officer —1
9. Publication Assistant —1
10. Education Officer —1
11. Curator for Education – 1
12. Layout Artist —1
13. Artist —1
14. Carpenters —2
15. Marksman —1
16. Driver —1
17. Cleaner —1
18. Librarian —1
19. Library Assistant —1
20. Photographer —1
21. Photographic Assistant —1
22. Conservator —1
23. Conservation Assistant —1
24. Preservation Assistants —3
25. Laboratory Attendant —1
26. Head Clerk or Office Superintendent —1

27.	Accountant	—1
28.	Clerks	—1 or 2
29.	Stenographer	—1
30.	Storekeeper-*cum*-Clerk	—1
31.	Attendants	—depending on actual requirement
32.	Gallery Attendants	—do

The museum should have a well equipped laboratory not merely to attend to the conservation requirements of the State Museum but also to offer such help as may be possible to the museums under the jurisdiction of the State. It should also have a van for carrying out educational activities.

(d) National Museums

The pattern of staff recommended for the Central or National museums is as follows :

1.	Director	—1
2.	Joint Director	—1
3.	Assistant Director	—1
4.	Keeper for each discipline	—1
5.	Dy. Keeper for each discipline	—1
6.	Research-*cum*-Curatorial Associate for each discipline	—1
7.	Clerk-*cum*-Typist for each discipline	—1
8.	Attendant for each discipline	—1
9.	Keeper Public Relations	—1
10.	Stenographer	—1
11.	Keeper (Education)	—1
12.	Senior Guide Lecturer	—1
13.	Guide Lecturers	—3 to 4
14.	Slide and Film Operator	—2
15.	Museum Bus Driver	—1
16.	Museum Bus Cleaner	—1
17.	Exhibition Officer	—1
18.	Exhibition Assistant	—1
19.	Chief Conservator	—1
20.	Asstt. Conservator	—1
21.	Preservation Assistants	—3 to 4
22.	Photographer	—1
23.	Storekeeper-*cum*-Clerk	—1
24.	Stenographers	—2

25. Laboratory Attendants —2
26. Security Officer —1
27. Security Assistants —2
28. Chief Research-*cum*-Publication Officer (in the grade of the Asstt. Director) —1
29. Keeper (Publications) —1
30. Publication Officer —1
31. Research Officer —2
32. Typist-*cum*-Copyholder (Publication) —1
33. Publication Storekeeper —1
34. Photo Officer —1
35. Senior Photographer —1
36. Assistant Photographers —4
37. Photo Attendants —2
38. Asstt. Director (Exhibitions) —1
39. Keeper (Presentation) —1
40. Dy. Keeper (Presentation) —1
41. Layout Artist —1
42. Artist —1
43. Marksman —1
44. Typist-*cum*-Clerk for Exhibition Cell —1
45. Stenographer for Exhibition Cell —1
46. Workshop (Carpentry) Supervisor —1
47. Carpenters or Fabricators —6
48. Storkeeper (Exhibition Cell) —1
49. Carpenters' (or Fabricators') Assistants —2
50. Bandhanis (Skilled labourers for transferring heavy objects) —8
51. Keeper (Modelling) —1
52. Chief Modeller —1
53. Modellers —5
54. Moulders —2
    (for public sales as well as for installation of exhibits, by carrying out repairs of sculptures, etc.)
55. Modelling Attendants —2
56. Administrative Officer —1
57. Jr. Administrative Officer —1

58.	Head Clerk	—1
59.	Accountant	—1
60.	Cashier	—1
61.	Storekeeper (office stores)	—1
62.	Clerks	—6
63.	Typists	—2
64.	Gestetner or Xerox Operator	—1
65.	Gallery Attendants	—Depending upon the museum and actual requirements
66.	Guard	

The financial implications have to be computed on the usual components of salaries, misellaneous office contingencies, museum van and cars, building and maintenance and improvements of the building.

There are already a few national museums under the control of the Central Government namely, (1) Art and Archaeology (National Museum, New Delhi); (2) Anthropology (National Museum of Man), Bhopal; (3) Natural History. (National Museum of Natural History, New Delhi, under the Deptt. of Environment, Govt. of India); (4) Rail Transport (Rail Transport Museum, New Delhi, under the Ministry of Transport, Govt. of India); (5) Science and Technology (Birla Industrial and Technological Museum at Calcutta, and three others of equal national status presently at Bombay, Bangalore and Patna, while the fifth is coming up at Delhi, all under the National Council of Science Museums controlled by the Department of Culture, Government of India); (6) Modern Art (National Gallery of Modern Art, New Delhi, under the Department of Culture); (7) Crafts (Crafts Museum, New Delhi, controlled by the Handlooms and Handicrafts Board of the Ministry of Textiles). There is as yet no national museum for children, nor on Arms, Forestry, Agriculture, Medicine, Space Research, Flying etc.

The exact number of posts in each category suggested above are tentative, and would depend upon actual requirement in each category of national museums. The scales of pay are not suggested as they should conform to the recommendations of the IV Pay Commission that have been accepted by the Government of India. Besides the museum personnel would deserve a better deal than they have received so far. The academic personnel would have to be equated with the teaching staff at the universities as already suggested elsewhere.

(e) Conclusion

In India, for a long time to come, the museum movement will have to be supported by the Government, considering the increasingly high cost of establishing and running museums, the low margin of saving of the people at large, besides the vulnerability of the objects of arts and craft, natural history, archaeology, epigraphy, numismatics, anthropology and archives to smuggling beyond the bounds of the country. This last phenomenon is intensified by the high prices such objects fetch in foreign markets in spite of the Antiquities and Art Treasures Act, 1972, and the Unesco

Convention on the Means of Prohibiting and Preventing Illicit Import, Export and Transfer of Ownership of Cultural Property (1970). The case of the Sivapuram Nataraja bronze, which first changed hands for Rs. 2000 but ultimately fetched 1 million dollars in New York is a testimony to this phenomenon.

The two large university museums at Varanasi and Calcutta (the Bharat Kala Bhavan and the Asutosh Museum, respectively) cannot strictly be placed under the three-tier system suggested above, as each has a distinctive role of its own and a higher status than that of the regional museum and yet not reaching the national level. Similarly there are several private museums in India such as the Raja Kelkar Museum at Pune, the Fatehsingh Gaekwad Palace Museum at Baroda, the Sawai Man Singh II City Palace Museum at Jaipur, each of which is larger than a Town museum and yet lesser in status than a regional museum in spite of the importance and quality of some of their contents.

The Indian Museum, Calcutta, the Salarjung Museum, Hyderabad, the Prince of Wales Museum, Bombay and the Government Museum, Madras are as good as the National Museum at New Delhi. They should, therefore, enjoy an equivalent status in their own right. The role they would play in the museum movement in the country would depend upon their activities, achievements and policies.

The Baroda Museum and Picture Gallery, the Museum and Picture Gallery, Chandigarh, the State Museum, Lucknow, the Government Museum, Mathura, and the Allahabad Museum are important landmarks in the network of museums in the country and have the potential to contribute substantially to the development of museum activity on an all India basis. These museums are already established and may not have a specific place in the three-tier system in so far as the pattern of the growth of museums of the future is concerned, except that smaller museums may look forward to their help and co-operation in many fields provided the policy that governs their activities permits such generosity.

With proper co-ordination and even a loosely worked out scheme of areas or spheres of influence of the different categories of museums through the revitalization of the Central Advisory Board of Museums it would be up to the larger and more generously endowed museums to come forward and help the museum movement in the country as best as they may. It is for the Central Advisory Board to work out a policy for this purpose and for the governmental agencies primarily to support the policy with funds, if we are to propel the museum movement properly in this country.

Amelioration of service conditions and salary grades of the Museum professionals is closely connected with the development of museums in India and, therefore there is a need to ameliorate the service conditions of the museum professionals. What ails the museum profession in India today, is the lack of adequate training facilities and respectable scales of pay to make the profession effective and attractive enough.

As stated earlier there are six Universities or like institutions in India where there are courses of teaching in Museology. But regrettably, as has been stated earlier, not all of them are of the same standard.

In this context it may be emphasised that museology is largely methodology or technology which is meant to be applied to the museum objects for the purpose of disseminating knowledge in the most acceptable and effective way apart from preserving the museum objects from decay and disintegration. It is, therefore, essential that any one who adopts the museum profession must specialize himself or herself in any or more disciplines of knowledge basically up to the post-graduate level so that he or she can apply the museological technologies to the proper dissemination of that knowledge. There is no getting away from this basic requirement and fundamental promise, for education of the public, in a non-formal way, has become one of the principal functions of museums in modern times.

For instance, in a hospital an anaesthetist applies anaesthesia to a patient who is to be operated upon by the surgeon, but he is expected as much as the surgeon himself to be thorough with all aspects of the human system, its anatomy, and physiology, the nervous system, the musculature, the veins and arteries, circulation of blood, the behaviour of the lungs and heart, the function of the brain, the nature of the ailment and the treatment required, as well as the application of medicament. If he does not know all this he would not be in a position to do his job properly and would not be in a position to rise equal to the occasion in the event of a crisis.

Anyone in the museum profession who does not have the complete background of any one subject such as art, science, technology, engineering or natural history, as the case may be, will be no more than something like an electrician in a hospital who may skilfully operate the switches and manipulate the position of the lights to suit the requirements of the surgeon, in the entire process of museum keeping. Without an adequate background such a museum man will at best be an efficient storekeeper or a display specialist or showman or an exhibitionist.

Apart from the University courses mentioned above, there are also limited facilities for in-service training in general museological practices as well as conservation techniques at a few places. But the available facilities are far too inadequate to cope with the needs of all the museological institutions in the country, which number around 400 today, as contrasted to 1500 in Japan or nearly 8000 in the U.S.A.

There is no doubt, therefore, that something more positive and helpful must be done to ensure training in museological methodology both at the University faculties as well as at the larger and better equipped museums in the country. It is all the more necessary because most of the teaching faculties are without any museum where ideal conditions prevail or where practical instructions can be given. There is therefore greater need for collaboration between the larger museum and the university faculties of museology. It is not, however, suggested that museums should arrogate to themselves the primary responsibility of a University Department or even replace or usurp it. If they did so, their main functions would be bound to suffer. What is suggested is that the faculties may take the advantage of the practical expertise of the museum professionals as an additional measure.

However, in the field of conservation of the museum objects it must be emphasized that the situation calls for immediate attention. For as stated earlier, there are at the most 10 institutions in the country as a whole, where some measure of standard work is done, while the total number of museum laboratories is about 50. The majority of our museums, therefore, are without any facilities for conservation, and the existing institutions cannot help them to conserve their objects. The National Research Laboratory for Conservation at Lucknow set up in 1977 is some help, both in training and in conserving actual specimens. But it cannot either build up a countrywide network of laboratories, equip them adequately, or fill them up with trained personnel with any measure of appreciable speed, even if it plans to do so in the long run. It would be desirable, therefore, to set up a network of even first-aid laboratories, and at least one large regional laboratory at the State level to cope reasonably with the actual needs of conservation on regional basis, and have the personnel quickly trained up in the theory and practice of conservation.

Now to turn to the second point, the museum profession involves several categories of jobs, and most of these have to be carried out by the museum man himself whether he is a Director, Curator, Asstt. Curator, Curatorial Associate or a Technical Assistant, more so in a small museum with a small supporting staff. These jobs comprise (i) acquisition, (ii) documentation, (iii) conservation, (iv) display, (v) educational activities, (vi) publications, (vii) temporary exhibitions, and above all, (viii) security and (ix) administration without which the museum cannot sustain itself.

A museum curator has normally to know and perform all these duties and much more than has been stated, and yet hold his own as a dependable scholar of respectable standard in his fields of specialization. This applies much more appropriately to curators or small museums, where they have to carry out all the duties themselve, and yet they must pore over books, learned journals, and encyclopaedias, and keep their knowledge-up-to date, carry out their own researches and attend seminars to speak on subjects of their specialization so that they may learn from the exchanges of views with other scholars and maintain their position in the sun. Then there are the myriads of scholars, both from at home and abroad, who visit their museums, often without notice, and take away much of their time for the pursuit of their own interests. With all this they do not have the compensation of a respectable salary that would enable them to keep body and soul together. This is also in sharp contrast to the work of the college or university teachers, who have no more responsibility than to teach and have the added advantage of long holidays and sabbaticals with opportunities of steadfastly pursuing only their scholarly ambitions. They do not have to bother about arranging exhibitions, ensuring security, maintaining discipline, or assuming financial or executive responsibility, not to speak of running an institutional administration.

I would like to draw the attention of the society to the gravity of the situation prevailing in the country today. For, if it is considered by the society that the art galleries and museums are essential institutions of life, the society must be in a position to recruit the most suitable persons to such institutions for the service of the society. This the society would be in a position to do only when the service conditions are made attractive enough, otherwise, these institutions are fraught with the risk of falling into the hands of second-rate or even third-rate personnel, with obvious consequences, which can rather be very well imagined than described. The situation can be gauged from the difficulty of recruiting proper museum personnel today even in the national institutions where the scales of pay are considerably better.

The concrete suggestion, therefore, is that the scales of pay of museum professionals should at least be equal to the scales of the University teachers, if not even better, so that a fair chance may be there for recruiting the right type of personnel to man our museums in the future. For there are some who are highly scholarly, and yet unwilling to take to teaching on a regular basis, or face student indiscipline and are more content to confine themselves to researches which they may carry out in a museum. At any rate the suggested system, if adopted, might promote some healthy mobility between the museum themselves on the one hand and between the museums and Universities on the other. It is less likely, however, under the existing circumstances, that a top University would like to exchange places with a museum director. The results of a recent effort by the Government to induct a University professor to the Director's chair of one of the national institutions have shown which may be wind blows and why.

The situation would warrant cool and calm consideration of what ails the museum profession in India today and adoption of remedial measures to ensure the proper maintenance and proliferation of the national heritage entrusted to the museums in the land.

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Nil Ratan Banerjee (b.1922), a King Edward Memorial Scholar of the former C. P. and Berar, obtained his Master's degree in History from the Allahabad University in 1945. He was awarded a Fellowship by the German Academic Exchange Service to study West Asian Archaeology at the Free University of Berlin (1959), and a Fellowship by the Royal Government of Netherlands (1961) to conduct research on the Iron Age of India in Amsterdam. The Calcutta University awarded him the D. Phil. degree in 1963 for his pioneering work on the subject.

Dr. Banerjee is one of the distinguished band field of archaeologists to be trained by the late Sir Mortimer Wheeler.

Before his induction in the Archaeological Survey, he was a Lecturer in the Nagpur University. In 1947 he became a Scholar in the Survey for exploring the megalithic monuments in south India. In 1948 he was appointed to the post of Dy. Superintending Archaeologist, and thereafter he successfully rose to the position of Director in the Survey. In 1976 he was chosen to head the National Museum, New Delhi as Director. He got his retirement from the National Museum in 1980. Thereafter he was appointed Visiting Professor in B. H. U. Varanasi. For a short period between 1966 and 1972 he was Archaeological Adviser to H.M's. Government of Nepal, when he extensively studied the art, archaeology and history of that country.

Dr. Banerjee has explored many archaeological sites in India and Nepal and has conducted a score of excavations both in this country and Nepal, notable among which are Sanur, Amirthamangalam, Sengamedu, Nagda, Ujjain, Ahichchhatra, Tilaurakot and Lumbini.

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Dr. Banerjee, has travelled widely all over the world. Modest, soft spoken and a distinguished scholar, he is also a linguist, being equally at home in Tamil, Hindi, Marathi, Nepalese, Bengali, Sanskrit and German, besides English.

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